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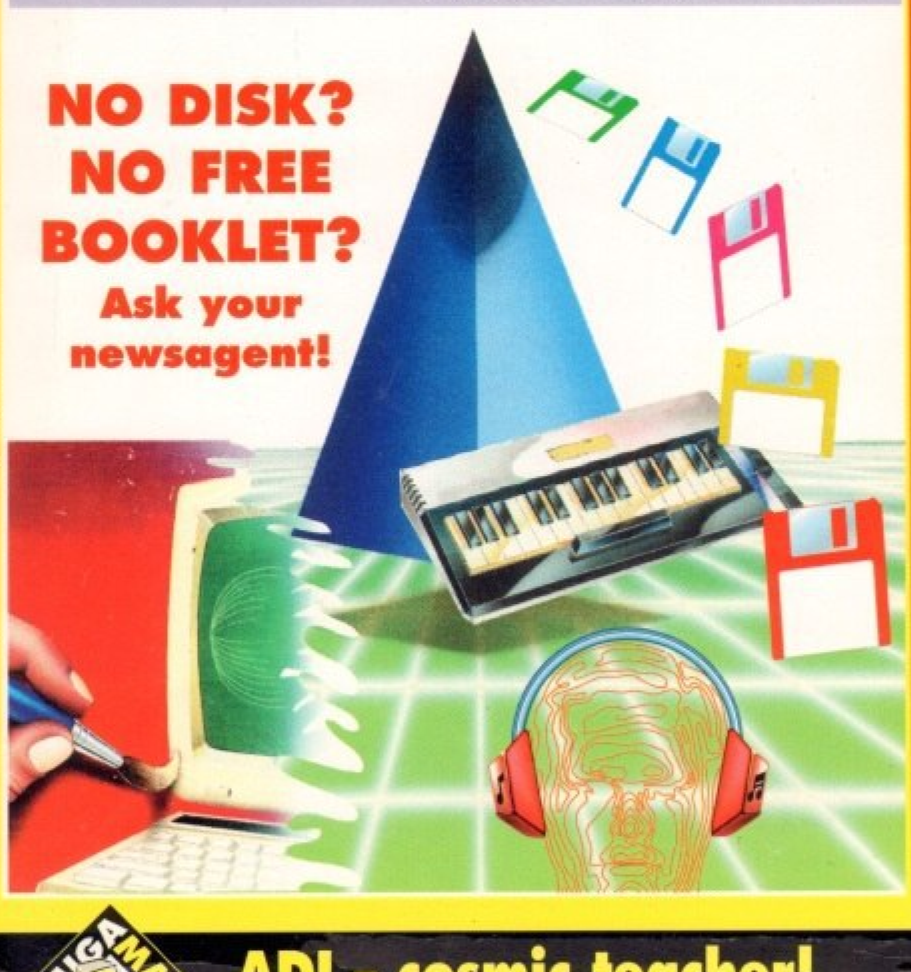
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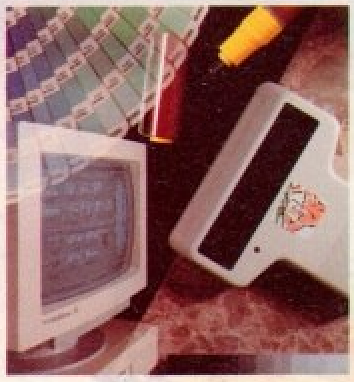
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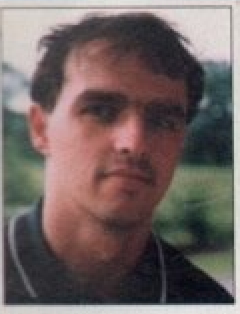
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Amiga Computing has, for four years, been the only publication to offer quality in-depth coverage of the entire market, including everything from shoot-'em-up platform games to the most expensive top-end productivity hardware and software.

In this issue, you'll find the latest game releases, reviews of the newest hardware, the best news column money can buy, and our usual Almanac columns for the dedicated user.

Our aim is to provide something for every thinking Amiga user, but if we fail to please, we're always ready to take some stick through the ESP pages. We don't pull our punches when reviewing a product that's not up to spec, and we don't expect our readers to either.

Try the *Amiga Mart* section for a comprehensive look at the best in bargain buying allied to hints and tips on making your money last and the VFM (Value For Money) Top Ten buys of the month.

We think it offers the ideal balance of reviews and opinions with hard facts on prices and specifications, so dive in if that tricky decision on what and where to buy next is turning into a consumer headache.

Remember – no other purchase is necessary when you buy the complete Amiga magazine, *Amiga Computing*.

Stevie

TAKING



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REGULARS



Turn to page 123 for the ultimate monthly buyers' and shoppers' guide, with reviews, listings, classifieds and the VFM Top Ten. Can you afford to miss it?

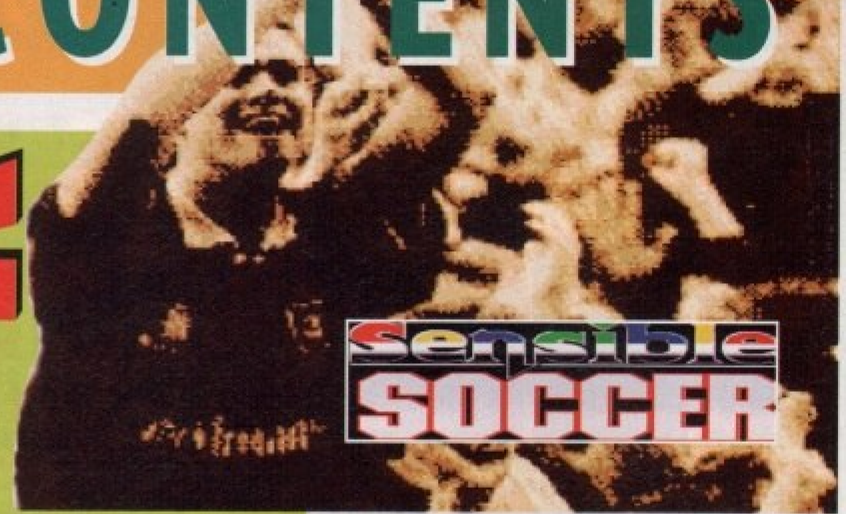
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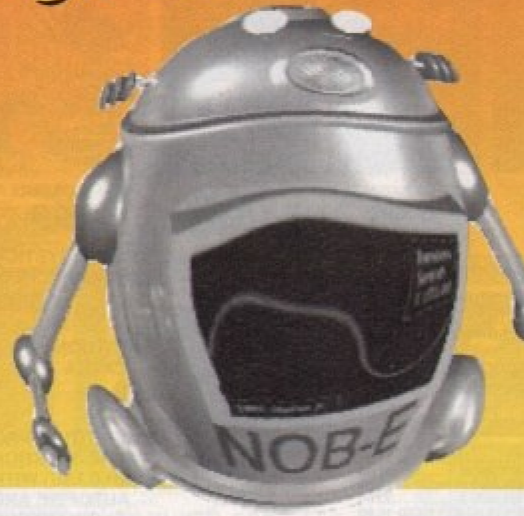
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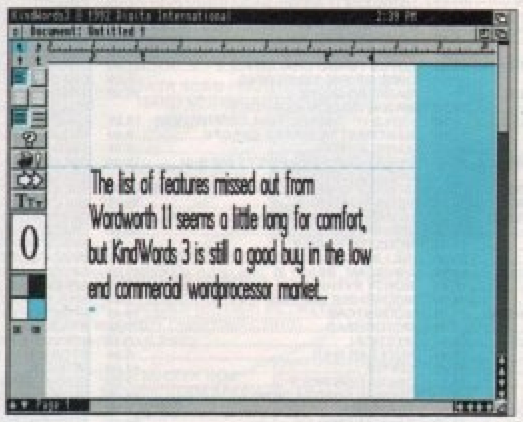
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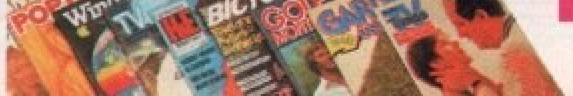
The three top image processing packages put through their paces in an eye-watering graphics feast. Turn to page 18



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Page 45

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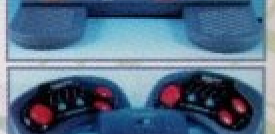
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AMIGA COMPUTING NEWSLINE

By John Butters

New Amigas gain power

A DEVELOPER claiming to have two new Amigas says Commodore have scrapped plans to use 68020 processors in their new mid-range Amiga, and instead chosen the more powerful 68030 chip.

Expected around the end of this year, the machine is fitted with the new AA chip set. It will have sockets for up to 16Mb of fast RAM and 4Mb of chip RAM.

Housed in a "pizza-box"-style case, three inches high and 15 inches wide and deep, the machine runs from Workbench 2.1. It has a high density floppy disk drive, an internal 52Mb Quantum hard drive and possibly a smart card slot.

A microphone port works with a built-in digitiser allowing 8-bit 22kHz sampling and there will be a pair of Midi ports. Unconfirmed reports suggest Motorola's powerful Digital Signal Processing chip will open up the potential for scores of new high-end applications to be run from the Amiga. There is an A/D chip for the microphone and two D/A chips for the audio.

The computer's sound will be 16-bit four channel at up to 56kHz, and will be able to emulate eight 8-bit channels at 56kHz and up to 16 8-bit 28kHz channels. And at the top of the Amiga range, the A4000 uses much of the technology from the new machine lower in the range.

It has a 68040 processor and a Quantum 105Mb hard drive. Essentially an improved A3000, it has Zorro III expansion slots identical to the A3000's.

It will be supplied with 16Mb of fast RAM and 4Mb of chip RAM. These can be expanded to 64Mb and 16Mb respectively.

"These machines are stable enough for production, but the higher-ups won't release them," said our source. "It's frustrating to see such potential wasted."

Commodore remain quiet on new models. "We are spending a lot of time and a lot of money investing in the Amiga," offered a spokesman.

He added: "There might be new machines as early as this year."

AA chip set

Among the new chips is an Amber-type de-interlacer chip with 1Mb of video RAM to handle increased colour depths and de-interlaces all but the highest resolution modes.

Lisa is another addition, which a technical expert says appears to be responsible for graphics.

Resolutions are similar to those with the ECS, with the addition of 800 x 300, 800 x 600 interlaced, 1,280 x 480 and 1,280 x 960 interlaced.

The palette is 24-bit. The 800 and 1,280 modes have 8-bit 256k colours and 6-bit 4,096 colour HAM modes respectively and can handle up to 30 frames per second.

Sprites change to match the screen resolution and can be up to 64 pixels wide and have no height limitation.

Switching systems

AMIGA users can now switch between different versions of the computer's operating system by clicking on mouse or joystick buttons.

Power Computing's (0234 843388) Automatic Kickstart Switch fitted with Kickstart 1.3 and 2.04 ROMs sells for £99.

CDTVs in trade-in deal



A500s can now be traded in for CD brother

UNDER a scheme organised by Commodore, A500 owners can trade in their computers for a new Amiga CDTV bundle containing a CDTV player, keyboard, mouse and disk drive.

Housed in black plastic casing, the setup enables Amiga owners to use their existing software and CD-ROM-based programs. The usual cost for the Multimedia Home Computer Pack is £599.99 but the offer price is £399.99.

Said Commodore's Kelly Sumner: "We think this is an excellent deal for Amiga owners.

"In exchange for any Amiga 500, even a four or five-year-old 1.2 model, they can get a brand new Amiga with CD-ROM and a 12-month warranty... the whole shooting match."

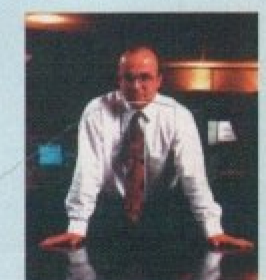
Running until September 15, the promotion is backed by independents and electronics chains Dixons and Comet.

Sumner takes control

KELLY Sumner, Commodore UK's former sales director, has taken over as head of the company's UK operations, it was confirmed recently.

His promotion comes at a time when the company faces fierce competition from Japanese console and CD-ROM manufacturers.

One of Sumner's main tasks will be to ensure that the Amiga sells the 300,000 machines forecast at the beginning of the year.



After 13 years at Commodore, Kelly Sumner is to head the UK operation

As predicted last month, Steve Franklin who had been in the number one seat for more than five years, is to take charge of a European campaign for CDTV.

Since its launch last year CDTV has sold only 50,000 machines throughout Europe. Franklin's job is to make CDTV happen and to do that he says it will need to become exciting enough to make eight to 16-year-olds want it.

"Steve has taken Commodore to the top of the UK leisure computer market. His knowledge of the industry and the potential of CDTV is unrivalled," said Sumner.

He added: "It's a great move for Commodore UK and Commodore in Europe."

A600 price cut denied

INDUSTRY rumours suggest Commodore could be set to slash the cost of the A600 within the next few months.

The manufacturer denies the move, although dealers reporting low enthusiasm for the machine consider a price cut likely and there has been some discounting already. Some firms are selling the basic model for £329, but these could be grey import machines – the A600 sells for about £300 in Germany.

One reliable source says the drop will be just £40, but some people are talking of a new price tag of between £199 and £250.

"The prices being quoted are fantasy band," says Commodore's Andrew Ball. "At the moment the recommended retail price for the A600 is £399."

The A600 was always intended to sell at a low price to enable it to compete against the games consoles which are starting to eat into the home computer market.



A600 due for price cut?

A570 to cost £349

A570 CD-ROM drives have gone into mass production and will now cost £349.99 – £50 less than originally planned – Commodore have announced.

The drives connect to any A500 to enable it to use compact disk-based programs and another drive called the A670 is due later this year for the A600.

YTV tune in to games

MORE details are now known about a new weekly computer and video games television show due for all ITV regions this autumn. Producers Yorkshire Television say that while the programme will be console-led there will be some coverage for popular home computers such as the Amiga.

Aimed at 10 to 16-year-olds, the as yet unnamed show will be made up of news, reviews and tips, and there will be a special feature each week covering subjects such as virtual reality and flight simulation.

Children will give their views on most of the games featured and there will also be a regular male and female presenter.

There will also be competitions and viewers will be able to get help from the 25-minute show. The first programme is due at 4.45pm on Thursday October 29.

Repair centre closes

THE company approved by Commodore to repair Amigas has gone into liquidation, leaving many computers stranded at FMG's Peterborough site.

Just before we went to press Commodore had gained a court order for the release of all third-party stock from the failed firm and say they are now working through the backlog.

A Commodore spokesman would not say how many Amigas needed attention but expected delays to be short. Computer giant Wang stepped in to help from their Brentford site.

Wang already had the contract to maintain A600s, including the on-site warranty offered with the computer.

"Wang are helping this interim but we haven't made a full appointment," said a Commodore's Andrew Ball.

Two telephone support lines have been set up for worried Amiga owners who had equipment at the repair centre and for those whose machines have just developed a fault.

For products covered on a return to dealer basis call 081-847 2223, or 081-231 3700 for Commodore products covered with on-site maintenance warranty.

Blaze guts Progressive

A FIERCE blaze has destroyed a top Amiga peripheral developer's Denver head office.

The night-time fire is believed to have started in a picture frame manufacturing plant next to the Progressive Peripherals and Software plant before spreading to engulf the computer firm.

Many of the products ruined in the fire were software for C64 and C128 computers. Development of high-end Amiga boards takes place at another office in the city.

The destroyed building was used mainly for administration, manufacturing and warehousing.

"The place is real gutted," said Mr Eric Stein, a local man. "I've driven past and it looks pretty totalled."

At the time of going to press no-one from the firm was available for comment, although a recorded message told telephone callers that Progressive were moving to a new site.

Mastering the Amiga

THREE books have been added to Bruce Smith Books' (0923 894355) range of publications for Amiga enthusiasts.

Mastering Amiga DOS 2 – Volume 2 contains extra commands to take it up to date with AmigaDOS 2.04. *Mastering Amiga Printers* is a guide to choosing and using printers. The third release is a C tutorial, *Mastering Amiga System*. Starting with a basic knowledge of C it is claimed Amiga programmers will progress to the status of expert.

The books cost £19.95 each, except for *Mastering Amiga System* which supplied with a disk costs £29.95.

Superbase range improves

THERE have been a number of changes and improvements to Oxxi's (010 1 310 427 1227) Superbase database range, including the launch of SBase Personal 4.

Compatible with Workbench 2.0, the home version now has improved data management and more ease of use features.

Listed among the improvements are new data manipulation tools and Logical Fields which broaden the types of data that can be handled.

Said Oxxi boss John Houston: "SBase Personal 4 brings some of the most sophisticated data management tools to the Amiga computer at an exceptional price point."

Costing $149.95, registered users of earlier versions can upgrade for between $50 and $65.

Higher up in the range, Superbase Professional 4 has bugs from v1.01 corrected and also boasts improved ARexx and printing support.

Upgrades to v1.2 are free to anyone who bought the program after June 1 and $20 to other users of Superbase Professional 4. Newcomers pay $299.95.

And for people needing to share files with other Superbase users, including those using the program on PCs, there's SBase Professional 4 LAN.

Up to ten machines can be linked and a key feature of the package is its record locking ability which prevents multiple users of the same file updating out of date records.

Prices range from $149 to $799, depending how many users are needed.

British prices were unavailable at the time of going to press.

A3000 price halved

BASIC A3000s are now available for £1,500 – half the price that the computer has been sold for so far in Britain.

Called A3000E, the computer is supplied with a 52Mb hard drive, 1Mb of chip RAM and 1Mb of fast RAM.

Trade distributor ZCL's Dave Cheetham (0543 414817) told *Amiga Computing* that its memory will be insufficient for many people's needs but added that it is a good starting platform which can be developed.

He added that there would be a similar deal for tower systems.



Basic A3000s available for £1,500



The plastic in question being your trusty Amiga 500, of course. Because if you take it along to your local stockist and trade it in, we'll exchange it for a new generation Amiga CDTV multi-media computer pack for only £399.99.* That's £200 less than the normal retail price. And remember, that includes an Amiga CDTV player with keyboard, mouse, floppy disc drive and a 12 month warranty - the whole shooting match. This fantastic offer to our Amiga customers closes at the end of September. So hurry, as they say, while stocks last. And don't forget the plastic.



Monitor not included

AMIGA CDTV

*TRADE-IN MACHINES MUST BE COMPLETE AND IN WORKING ORDER. OFFER ENDS 30TH SEPTEMBER 1992. AVAILABLE AT SELECTED HIGH STREET STORES INCLUDING DIXONS AND SPECIALIST INDEPENDENTS. FOR DETAILS OF YOUR LOCAL STOCKISTS CALL FREE ON 0800 686868.

Crime protection arrives

AS LATEST government figures show house break-ins on the up across the UK, a firm have just developed an alarm to protect Amiga setups.

Operating from nine-volt batteries, the device fits on to the back of the computer or monitor, with two magnetic sensors controlling the alarm.

Whenever, the Amiga or monitor are lifted more than a quarter of an inch the intruder is deafened with a 111 decibel sound.

Available from GF Cape & Son (0752 700649), it costs £24.99.

Betters get better

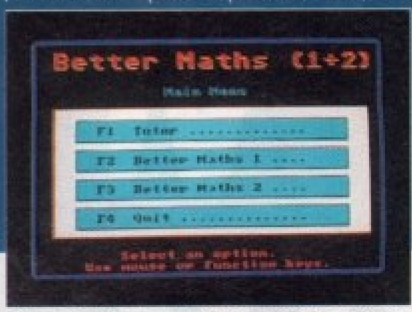
IRELAND-based School Software (010 353 61419477) are relaunching two of their Amiga education packages, Better Spelling and Better Maths.

For children aged between 12 and 16 years old, Better Maths is aimed as a GCSE revision aid and includes tutorials on all aspects of the subject.

Examples of topics covered are statistics, linear and equatic equations, ratio, sets and trigonometry.

Better Spelling, for those over eight years old, deals with the most commonly made spelling errors. It consists of irregular plurals, prefixes, suffixes, present and past participles.

Each program costs £22.95.



Better Maths is now suitable for GCSE revision

Ami-Back backups better

AMI-BACK 2 is an upgraded hard disk backup and scheduling utility which its developers promise will bring a wealth of features previously unavailable to Amiga users.

Claimed to be the fastest backup utility on the market, additions to the software are a compression feature which can decide which files are worth shortening, the ability to append backups on tape and DAT fast search support.

A recovery back-up mode allows Ami-Back to recover as much information as possible from crashed hard drives and there is a password protection feature.

Priced at US$79.95, it is available from Orlando-based Moonlighter Software Development (010 1 407 384 9484).

Drawing link with DTP

STRUCTURED drawing program Professional Draw has just been improved, allowing drawings to be transferred between it and the firm's Professional Page desktop publishing package.

Also in v3 are more than 30 automatic Genie functions intended to make routine design tasks easier, several text handling enhancements and improved colour handling.

"Professional Draw 3 represents the next step in the evolution of desktop publishing," says Gold Disk president Kailash Ambwani.

""The direct link with Professional Page 3 gives the graphic designer a totally integrated DTP environment and the Genie functions automate most routine tasks associated with design and layout," he added.

Requiring 2Mb of memory, it will cost $199.95. Gold Disk can be telephoned on 010 1 416 602 4000.

Price £129.95 from Silica Systems.

Demo maker arrives

RED SECTOR, a package to enable scrolling demonstrations to be created on Amigas, is now available in Britain.

Originating in Germany, the program is supplied with full English documentation for £24.99 by George Thompson Services (0707 664654).

British firms to lose £1.1 billion

SECURITY breaches will cost British firms £1.1 billion this year, says a report just issued by a top computer research firm.

Based on a survey of almost 1,000 companies, the National Computing Centre's report points to several areas where improvements in security are needed.

Poorly-written or untested software and viruses will cause most headaches for firms, says the report.

But unauthorised access to personal computers – such as the Amiga – is another key problem, with staff and contractors claimed to be behind the majority of incidents.

The 300-page IT Security Breaches Survey Report is available from the National Computing Centre for £146.50.

Getting to grips with German

LCL's first new title for more than two years is aimed at people wanting to learn a foreign language as the single European market nears.

Taking Amiga users from basics up to GCSE standard in spoken and written German, Micro German is billed as being suitable for travellers, students, enthusiasts and businessmen.

Included with the software is a program to generate business letters automatically and to make learning fun there is a series of educational graphic adventure games and puzzles.

Priced at £24.99, LCL can be telephoned on 0491 579345.



Micro German prepares Amiga users for single European market

Do you know something we don't?

Although *Amiga Computing* has scores of contacts in the Amiga world we need you. If you have some hot news ring John Butters on the news desk now on 0625 878888 or fax to 0625 879966. All information supplied will be treated in the strictest of confidence.

DIARY DATES

5 September 1992
All Formats Computer Fair
Organiser: Bruce Everiss
(0225 868100)
Venue: National Motorcycle Museum, Solihull
Software bargains, many from the public domain.

6 to 8 September 1992
European Computer Trade Show Autumn
Organiser: Blenheim PEL
(081-742 2828)
Venue: Business Design Centre
A new trade-only event for the computer leisure industry.

12 September 1992
All Formats Computer Fair
Organiser: Bruce Everiss
(0225 868100)
Venue: Sandown Race Course, Esher
A few bargains can be picked up.

5 to 8 November 1992
The Future Entertainment Show
(0225 442244)
Venue: Earls Court 1, London
Plenty of Amiga support, including a major presence from Commodore.

19 to 22 November 1992
Christmas Computer Shopper Show
Organiser: Blenheim PEL
(081-742 2828)
Venue: Olympia, London
Promised to attract several Amiga exhibitors.

OVERSEAS

8 to 11 October 1992
Computer Shopper Show
Organiser: AMI Shows Europe
(010 49 2234 22021)
Venue: Koln Messe
A chance to catch up on the year's developments in the active Amiga world. Formerly Amiga Koln.

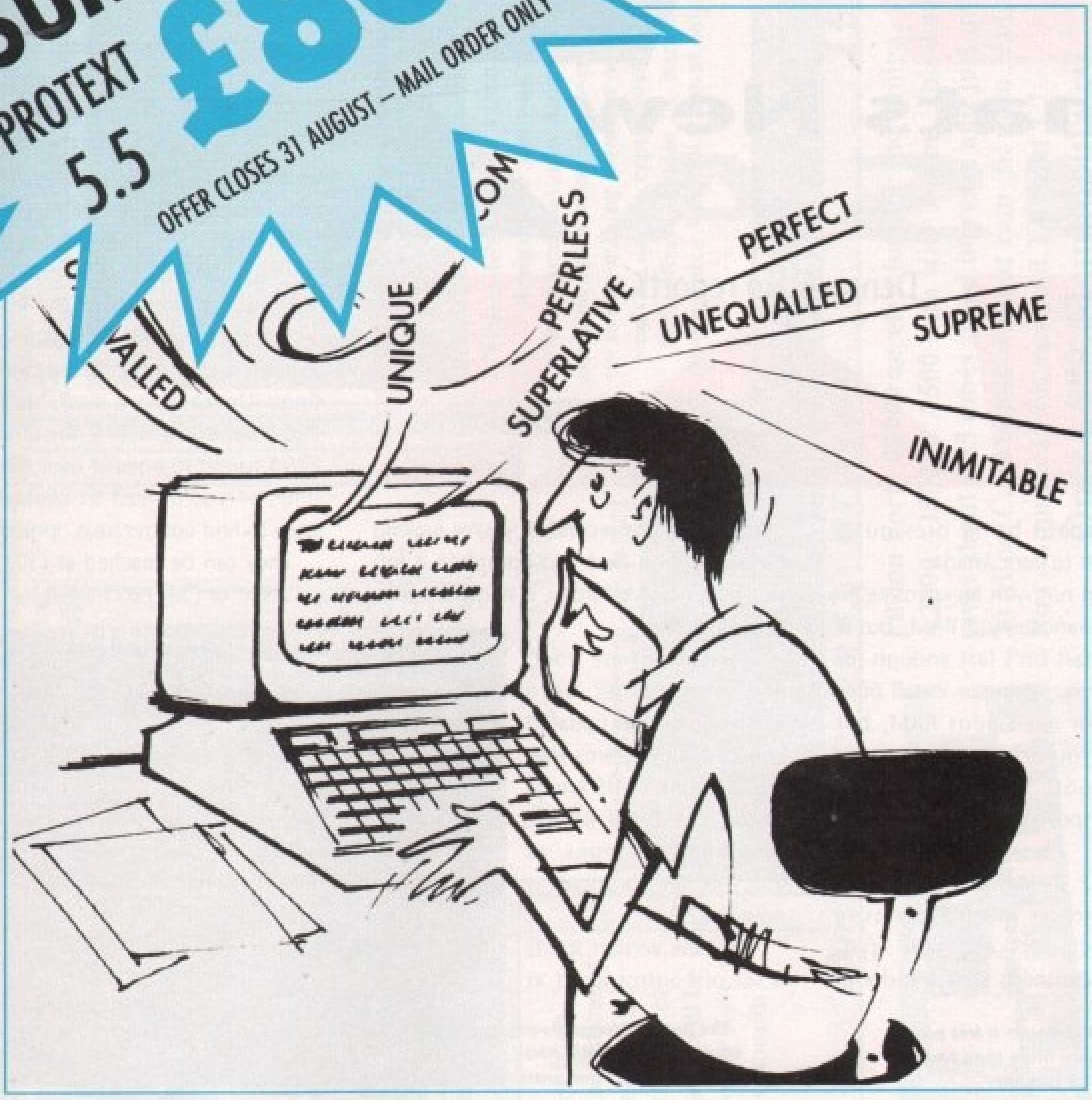
26 to 29 November 1992
World of Commodore '92
Organiser: Fairs & Fun
(010 49 8106 34094)
Venue: Frankfurt Exhibition Halls
The main Commodore show in Germany. 100,000 visitors expected.

• If your company is organising a show relevant to the Amiga and it's not listed, let us know so we can include the information in the diary.

SUMMER SALE
PROTEXT 5.5 £80 Inc. VAT & delivery
OFFER CLOSES 31 AUGUST – MAIL ORDER ONLY

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"…you won't be lost for words" . . .



. . . with Protext 5.5 because the pop-up thesaurus will provide you with inspiration whenever you need it. With words provided by Collins the thesaurus has 43,000 main entries and 827,000 responses!

Protext 5.5 introduces enhanced text formatting options. Automatic hyphenation lets you produce a well-spaced page layout without the bother of manually putting in soft hyphens. Protext determines the correct hyphenation points by algorithms and look-up tables. Elimination of widows and orphans is also provided. You will no longer need to worry about those infuriating single lines at the top or bottom of pages. Protext formats the text to avoid these as you edit the text. Extra blank lines at the top of a page can be suppressed.

New document analysis features provide a wealth of information about your text. You can examine a list of all the words used - alphabetically or by the number of occurrences. Other statistics shown include average word length, average sentence length and a table of the number of lines on each page.

Plus many more improvements . . .

- Enhanced file selector with different sorting methods, bulk copy and erase.
- Prodata users - mail merge directly from Prodata files, no need to export.
- Mail merge: nested repeat loops.
- New window-based help facilities.
- Improved line drawing.
- Spelling checker finds repeated word and missing capital letters.
- Conversion to and from WordStar 5.5 and Microsoft RTF
- Full printed documentation of new features.

Of course Protext still includes . . .

Choice of pull-down menu or keyboard operation, extensive printer font support and proportional formatting while editing, up to 36 files open, split screen editing, characters for 30 languages, index and contents, footnotes, newspaper column printing, file sorting, macros, indent tabs, mail merge programming language, exec files and the fastest search and replace around. Altogether the most comprehensive word processing software for your Amiga or ST.

"it's bloody brilliant" — ST FORMAT

"one hell of a performer" — COMPUTER SHOPPER

"if you need a professional word processor Protext is perfect" — AMIGA COMPUTING

"nothing else available comes close" — ST APPLICATIONS

PRODATA 1.2

New version of Prodata now with pull-down menus, mouse or keyboard operation, automatic record numbering, merge database, instantaneous filtering, prologue form, edit fields in any order, 2-across label printing. Full details available from Arnor.

Price: £85+VAT, upgrade from v1.1 £30+VAT.

PRICES (including VAT and delivery)

For Commodore Amiga, Atari ST or TT.

Protext 5.5	**£152.75**
Upgrade from 5.0 to 5.5	**£30**
Upgrade from 4.2/4.3 to 5.5	**£60**

Please return your original discs when upgrading

French or German spelling dictionary	**£35.25**

When upgrading please return any extra spell checking dictionaries for a free update to the revised version.

☆ Both Protext 5.5 and Prodata require 1Mb of memory

VISA Access

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Whats New USA

Denny Atkin reports...

Like a Phoenix

PROGRESSIVE Peripherals & Software are planning to rise from the ashes that are all that remain of their Denver warehouse (see main news), as they have just announced the release of some long-awaited new products.

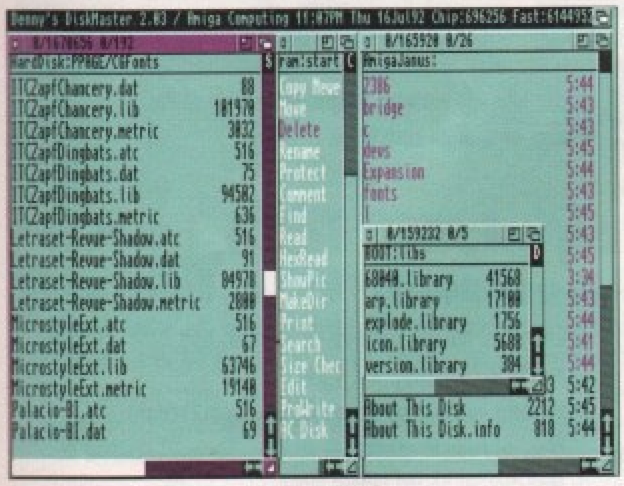
On the hardware side, the company announced a 68040 board that fits inside the Amiga 500. With room for 32-bit RAM and blazing 28MHz speed, this can make the unassuming-looking little A500 into a powerhouse that outruns £3,000 workstations.

PP&S had just started to ship their Zeus 040 accelerator for the Amiga 1500 and 2000.

With a 33MHz 68040 and up to 64MB of RAM, this board bring previously unheard of power to your Amiga.

The board can run with inexpensive 80 nanosecond RAM, but if fast isn't fast enough for you, you can install 60ns or even 40ns RAM, but you'd better be careful not to exceed warp speed!

Also included is a SCSI-2 DMA hard drive controller which Progressive claims can do synchronous data transfer at up to 10Mb per second. If you're looking for a machine that can complete a job you start now yesterday, it might be time to pray to Zeus.



DiskMaster II lets you open more than two disk windows

On the software front, ace programmer Greg Cunningham has updated two of his programs that are favourites of US Amiga users. The Baud Bandit terminal (or comms, as you folk say) program is now at v2.0.

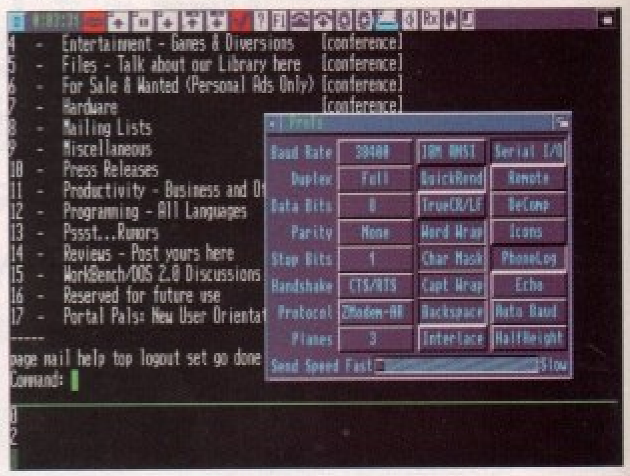
The new version sports a set of control icons at the top of the screen, an AmigaDOS 2.04-style user interface, pull-down menus (missing from the first release), and true IBM ANSI support for use on PC-based BBS systems.

In addition, the program now has a host mode, so you can use it as a simple BBS to access your Amiga from another location.

Greg has also updated his popular DiskMaster II directory utility package. The new version fixes problems with the Print Directory function and adds support for opening DM II on AmigaDOS 2 public screens, as well as a "Sort By" function.

The program also now plays .MOD files, and offers user-configurable custom key settings. Upgrades are available for $15 for Baud Bandit and $10 for DiskMaster II; PP&S hadn't re-opened their offices at press time, so you'll need to contact the company to find out overseas upgrade prices.

They can be reached at (303) 825-4144 by voice, or (303) 893-6938 by fax.



The new version of Baud Bandit supports IBM ANSI graphics and more

Hope for the World of Amiga

THE MS-DOS market in the US has grown to such gargantuan proportions that many entertainment software companies are strongly considering dropping all Amiga and Mac development and concentrating on software for PC clones.

Because people are snapping up so many cheap PCs, the US software companies are deciding that there's so much money to be made in the PC market, it's not worth creating products for the Amiga.

The few entertainment companies that are still supporting the computer are developing more and more of their products in Europe.

Most Amigans are pretty pessimistic about the future of the US Amiga market right now – the general feeling is that hot new machines with enhanced graphics and other PC-beating features must be introduced before Christmas, or the Amiga market in the US will begin to disappear, as the Atari ST market did a couple of years ago.

The good news, though, is that sources close to Commodore say that the current plan is to unveil new Amiga models at the World of Amiga Show in Pasadena, California, which will be held September 11-13.

The magazine ads for the show promise "hands-on new hardware," so hopefully we'll see the second generation of Amigas unveiled there.

We don't count the A600, which isn't available here, and is generally perceived by US Amiga dealers as nothing but a stripped down, crippled A500. Watch this space in two months for a full report on what hopefully will be an exciting show.

TTR Shut down, Sierra reconsider Amiga

It hasn't been a month of good news for US Amiga companies. TTR Development, marketers of MRBackup Professional, Workbench Management System, RXTools, and the TTR Floptical Disk Drive, announced that they were closing their doors in July.

They cited the US economic recession, a slumping domestic Amiga market, and internal personnel problems as contributing to the shutdown.

Meanwhile, a Sierra support representative on the GEnie online network reports that Sierra are currently re-evaluating their future Amiga product plans.

The current Sierra interpreter, used for almost all their programs, is pokey and jittery on 68000-based Amigas, and the company is considering whether it will be financially viable to revamp the interpreter to run better on stock Amigas.

However, Sierra's recent financial statements haven't been promising, and sources close to the company fear that future Amiga product line may be eliminated as part of company-wide cutbacks – the company's Amiga sales may not be high enough to justify completely revamping the program interpreter.

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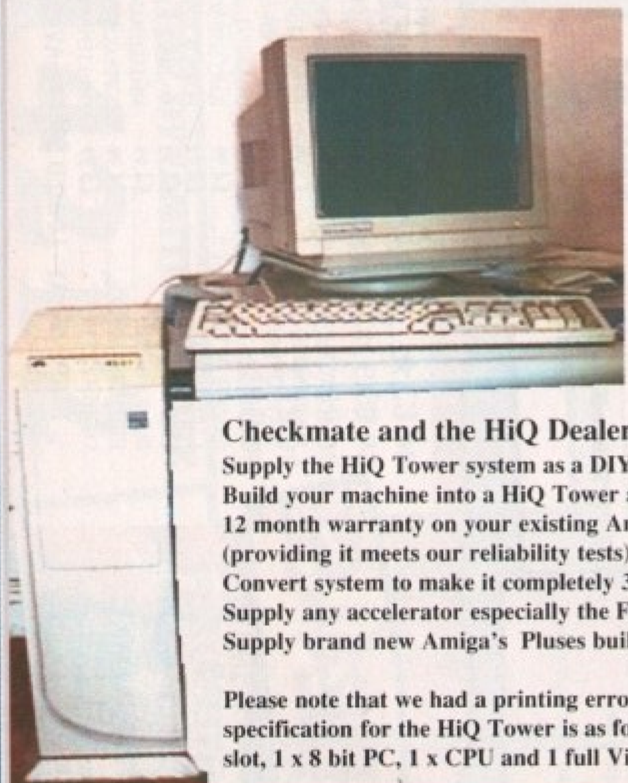
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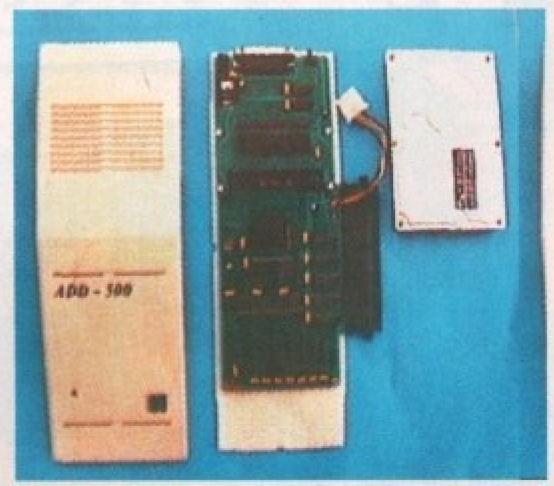
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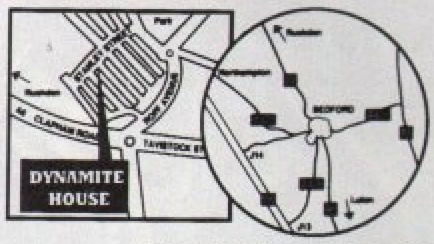
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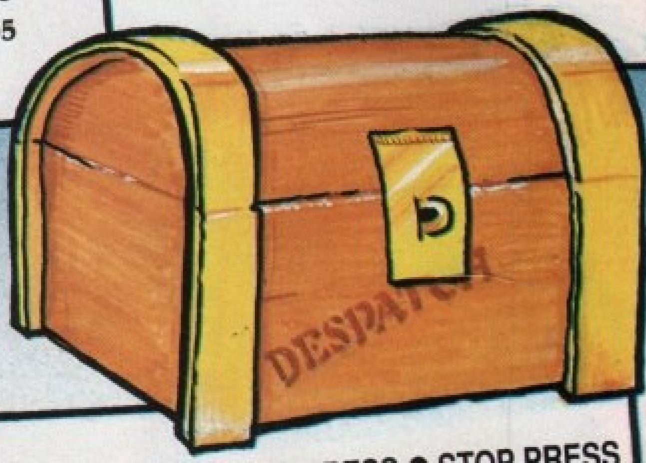
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The

Thanks to the graphics explosion, the art of producing and manipulating imagery has become the Amiga's biggest growth area.

In this article we'll examine the latest ADPro from ASDG, ImageMaster from Black Belt, plus an exclusive preview of Montage – formerly Mirage – the all new IP package from GVP.



Art Department Professional 2.1.3

Until the release of Image Master, ADPro was the only real contender for the image processing crown. Now its monopoly has ended and ADPro will have to fight hard for its place in the market.

Thanks to its individual style and dedicated approach, it's by no means the end of the ageing heavyweight.

Unlike the other two contenders, ADPro doesn't attempt to be all things to all men. In fact the software is much more akin to programs such as Adobe PhotoShop which have long been the Mac's main source of artistic inspiration in the field of commercial DTP.

Unlike ImageMaster and Montage, ADPro does not try its hand as a 24-bit paint package or indeed as a dedicated special effects processor.

Instead the software concentrates its efforts on converting images from one file format to another and in turn from one machine to another while processing its creations to give the best possible output.

Neither of the other two packages can match ADPro's linguistic features when it comes to available formats.

As a result, it's still the perfect choice or anyone who already has finalised artwork and merely requires it in another format, whether that be an alternative Amiga display or perhaps in a form other machines and users such as PCs, Macs or commercial print bureaux can understand.

Having said that, describing ADPro as a glorified CrossDos is to say the least a little unfair. It's true that if you have a file no matter what the format the chances are ADPro will be able to load it and subsequently save it in almost any other, but between the load and save the program offers an impressive array of processing and composition tools.

Graphics from a whole host of sources can be easy combined into a new and totally original images.

Although now common in a lot of serious software, ADPro was the first power program to implement a modular design. This means that although the basic framework of the software can remain the same, a whole host of new features can be issued as plug-in modules which the software can then access.

Dedicated

Because of this ASDG already offers dedicated module sets which expand the already impressive range of loaders and savers while also adding control for additional hardware such as scanners.

As mentioned earlier, ADPro offers an unrivalled range of loaders and savers which can be easily expanded thanks to the modular design. As you can see from the screenshots, the choice is impressive and is made even more so by the program's ability to load from and save directly to an ever-growing collection of 24-bit cards such as the IV24, Harlequin and FireCracker.

Once an image is safely imported, the actual processing can begin. Often the process in question may be simply a matter of adjusting the colour balancing in which case three RGB sliders are on hand to edit the current image plus brightness, contrast and Gamma. Like most of ADPro's processing options these affect the entire image.

A selection of six dithering options are also on hand to smooth out the colour transitions when working in lower resolutions.

Finally come the palette options giving complete control over the colour composition of the graphic in question, and of course palettes can be edited, saved and loaded as required.

As you can no doubt see from the operators screenshot, the choice is impressive. Unfortunately the majority of operators work on the entire image and cannot be restricted to specific areas as is the case with ImageMaster and Montage.

This above all underlines ADPro's main area of expertise. As mentioned earlier the package is not designed as a paint package but rather a dedicated image processor capable of altering existing images and combining the results with others thanks to the program's excellent composition options.

A perfect example of this is the GraphicStation image which has been compiled in ADPro from a scanned star field, a VistaPro generated landscape and a Real3D ray tracing which again incorporates scanned elements.

All the various images were initially in different formats and image sizes but with the help of ADPro's loaders and operators they where compiled together within a matter of minutes.

Once the choice of file format has been made, whether it be loading or



The familiar face of the ADPro main screen, but under the skin it is all change

image makers

Paul Austin, our resident graphics fanatic, provides the definitive guide to the big three in Amiga image processing

ADPRO overview

If your main interest is image combination, format conversion and overall adjustment of finished artwork, ADPro is still the best and fastest method of getting quality results.

For any user who wants to get artwork on paper via the Amiga or perhaps a lesser machine, the old heavyweight still leads the way.

saving, the more mundane options come into play via the command options.

These produce requesters for both loading and saving and also allow you to specify the orientation of the image to be imported, plus whether it is to be composited with any existing imagery which may already be loaded.

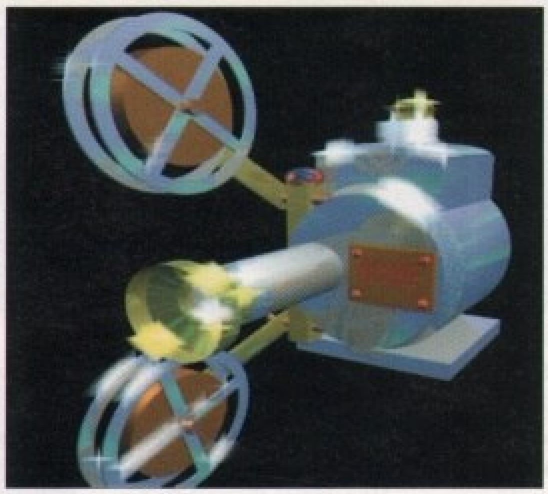
Also lurking within the Command options are the separation controls which again underline ADPro's forte for publishing.

This is a feature unique to ADPro and allows colour separations of the current image – something which is often essential for material destined to appear in print.

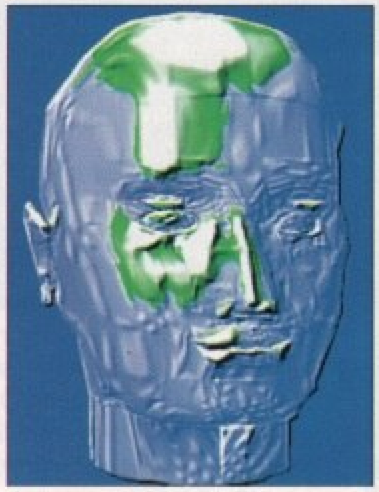
Lastly we come to screen control. From here it's possible to define in what form the image will appear on-screen. If for example you were working with 24-bit images but didn't have a board to view them, it's still possible to create an Amiga-based representation of the effects applied to the 24-bit data.

Alternatively once a standard Amiga display has been defined and executed, the software will give you the option to save directly in that format.

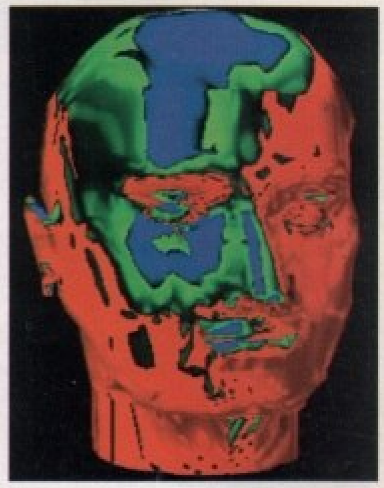
As a result, raw scans or 24-bit frame grabs can be converted directly into the Amiga display format of your choice.



An extra shine on Alternative's ACME camera, courtesy of Image Master



ImageMaster's elevation effect turning the silky smooth into the rough and ready



A familiar face with a shocking case of sunstroke thanks to IM's soarisation option

ImageMaster

After a long wait, a challenger to ADPro has finally appeared thanks to Black Belt, the company famous for the amazing disappearing HAM-E trick – a hardware display system which mysteriously vanished into the black hole known as the Commodore non-disclosure agreement.

Since the disappearance of the aforementioned hardware, Black Belt have gone noticeably quiet. Now the silence has been shattered by the release of ImageMaster, which in its youth was known as Image Professional and came as part of the HAM-E software bundle.

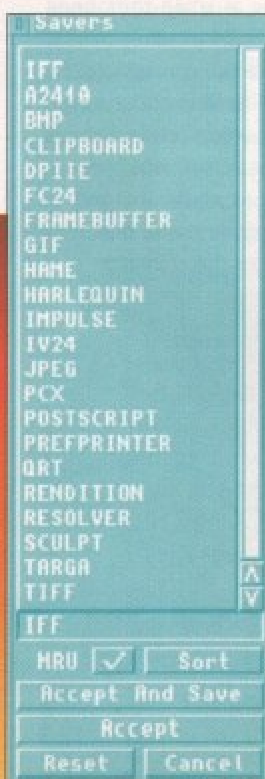
Although 24-bit boards have been on the market for around two years, up until the release of ImageMaster, ADPro was the only IP software capable of manipulating their output – and only then with a relatively limited number of special effects. Its main purpose was as a format converter, compositor and PostScript supplier.

What was required by the 24-bit community was a special effects engine capable of producing the kind of imagery Industrial Light and Magic have made famous. Unbelievable as it may sound, Black Belt have done exactly that by bringing Hollywood within the reach of anyone.

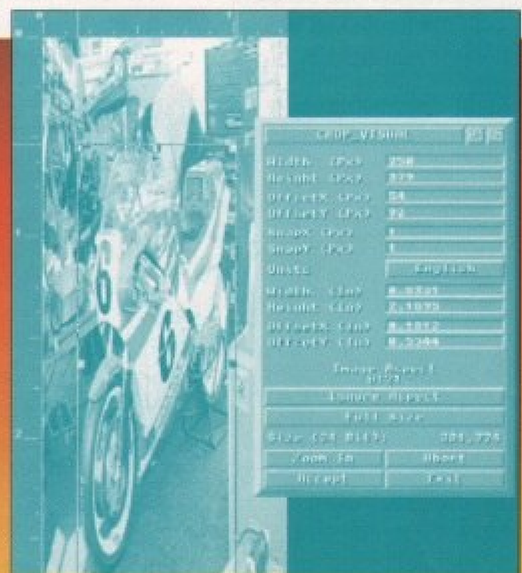
The actual software itself comes in several forms. ImageMaster is designed for the general user while Black Belt also offer a version designed specifically for the

➤

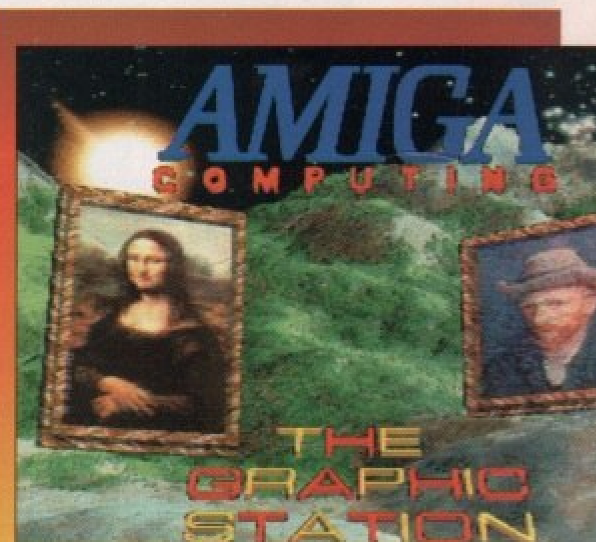




The muscle behindd the ADPro front-end. More processing options than you can shake a stick at



One of ADPro's visual editing options making life a lot easier



A classic example of what ADPro does best. The fastest composition system around

➤

FireCracker 24-bit board and, as mentioned earlier, Image Professional for HAM-E.

As is the case with all three packages, ImageMaster has ignored the standard format of pull-downs and icons and has gone for a control strip across the bottom of the screen which instantly evolves as you move through the software, constantly updating the display with a new selection of buttons reflecting your previous choice.

If there's one area in which the software suffers more than any other, it's undoubtedly in the interface. Although the progression from one control strip to another is very logical, it certainly does nothing for your inspiration.

This is a real shame as the artistic juices inspired by the incredible special effects soon dry up as you stumble around the package looking for the next option you wish to apply.

Guidance

It's true that the problem tends to cure itself in time but even after prolonged use you still find yourself yearning for the comfort of the occasional icon or at least some form of guidance through the seemingly endless selection of identical control strips.

This particular problem hasn't gone unnoticed by the lads and lasses at Black Belt and as a result a revised interface is promised for the next update to the package.

Let's hope it arrives sooner rather than latter for the sake of the software, and the frayed nerves of countless disorientated users. If you can forgive the interface the rest of the package is nothing short of a astonishing, thanks to a selection of effects and animation options which are almost beyond belief.

However, before I fall irretrievably into delirious ramble mode, it's worth a look at the structure of the software and the various options on hand.

On entry you're greeted with a selection of nine buttons which allow access to all IM's main functions. As you might expect, the first of these is the input/output button.

From here you can load an impressive array of standard Amiga images both 24-bit and otherwise. Unfortunately there's a noticeable lack of Mac and PC formats on offer – an omission that makes an IM and ADPro combination a must for commercial users.

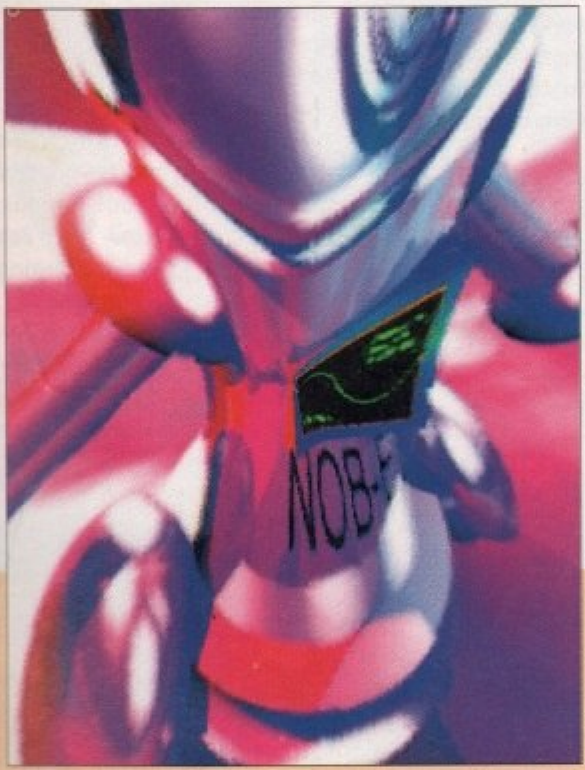
This is followed closely by the Composition button, which on boot-up is ghosted, as both a primary and secondary image are required for composition – as I said, it's logical stuff.

Next comes the process button where the vast majority of special effects await your command. We'll return to linger on these a little latter.

Following that, we have the Paint panel in which you apply standard painting techniques, define and cut brushes, select fonts and specify the impressive array of blending options.

Next comes the display panel where among other things you can watch IM-generated anims as small thumbnail representations of their 24-bit counterparts.

It's also here where you can actuate the program's excellent Film Strip option which produces a piece of pseudo-celluloid across the lower part of the screen which documents all your actions as the imagery is processed – an extremely useful feature if you're trying to master the animation of a specific effect.



Our hero gets back in time thanks to yet more IM effects with the whole process documented with the program's optional slideshow



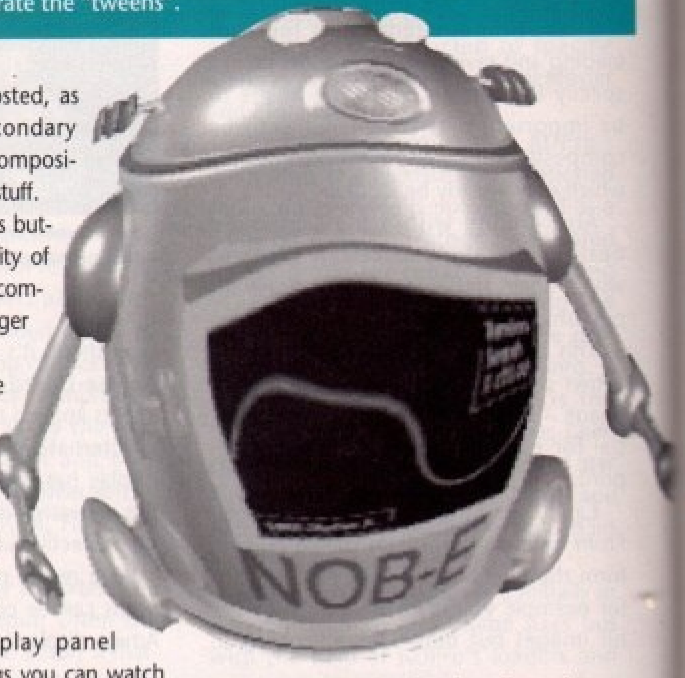


Unlimited

Following that comes the buffer panel which allows total control of the unlimited number of buffers, whether they be full-screen images or simple brushes.

ImageMaster allows you to create as many 24-bit buffers as your system memory will allow and from here they can be swapped, shuffled and deleted as required.

Almost every action creates a new buffer, and as a result if not managed properly the software can soon become full of countless images whether they be tiny brushes or "before and afters" generated by the application of special effects. Each new buffer must be individually named and then retrieved from the panel when required – again not good news for the creative juices.

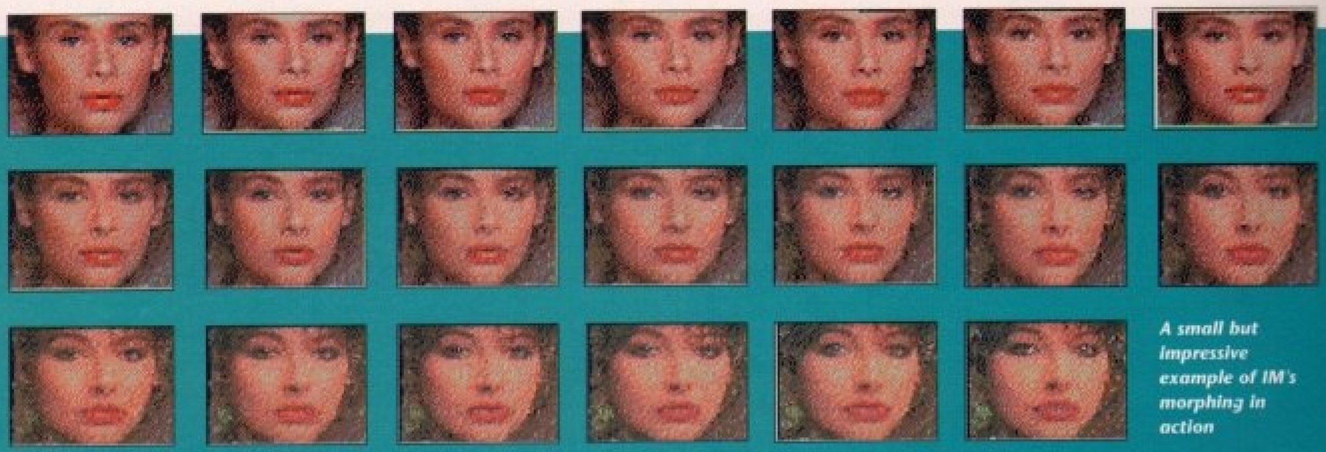


Little Nob-E showing the after effects of lager, ImageMaster, and curry frenzy

Black Belt would be well advised to take a close look at the new Scala and its miniature icons as an alternative system. The film strip already uses the technique so why not apply it to buffers?

Alongside buffer control we have the macro and setup panels which allow direct access to ARexx scripts and specification of the output image whether it be in a standard Amiga form or alternatively as a set command which executes a script each time the display is updated, thus allowing the new image to appear either on the FireCracker, Harlequin or other ARexx friendly 24-bit hardware.

Finally comes the Info panel which as the name suggests supplies all the necessary information on both the state of your



A small but impressive example of IM's morphing in action

Morph mania

Morphing is the buzzword of modern computer graphics and ImageMaster is the first package to bring it to the Amiga. It's true that DPaintIV has boasted morphing as an available function but in truth the DPaint offering is image to image transformation in its most basic form.

ImageMaster however, brings true 24-bit morphing employing geometric and colour information from both source images.

The basic concept of morphing is to produce an actual transformation of selected areas from the primary to the secondary. This should not be confused with a fade where an entire image gradually replaces another.

In the case of morphing points or shapes are selected in the first image and these then move and are subsequently replaced by elements of the second, giving the impression of a physical change rather than a simple fade, something which is impossible with any other method.

This is exactly how many of the stunning effects in movies such as *Terminator II* have been achieved. All that's required by the software is a "before and after" and ImageMaster will generate the "tweens".

system and all the relevant details on the buffers presently in use.

Composition processing and painting are three main areas of ImageMaster's expertise. As mentioned earlier, all three have their own button on the main panel. The composition controls allows you to combine the primary and secondary images into a new third image.

As with all ImageMaster's features, composition has been handled expertly, though through the eyes of a programmer rather than those of a designer.

Amazing

As a consequence, the options and output can be amazing. But thanks again to the interface it will be a long time before you'll feel happy about attempting any image combinations without the manual firmly at your side.

Processing options, on the other hand, are much easier to come to terms with and offer the kind of image adjustment and colour correction tools only matched by ADPro.

It's here where the 55 definable geometric transformations and special effects await your command, and that doesn't include the morphing options..

Aside from the pure power and variety of effects, one of the most pleasing features is the way in which they can be applied. Rather than simply affecting the entire image – as is often the case with ADPro – each effect can be used on an area in the same way as a standard paint package, thanks to a wide variety of rectangles, polygons and freehand option.

The painting options are again astonishing with the widest collection of available tools I've seen to date. The brush application options alone need to be seen to be believed, but unfortunately the perennial problem of the interface rears its ugly head yet again. Even minor adjustments such as colour, brush size and selection require countless trips through the interface.

In short, ImageMaster painting offers unbelievable power but you'll need a bottle of inspiration close at hand to keep your spirits up, and your juices flowing.

ImageMaster overview

As a processing environment, Image Master is just what the Amiga has been waiting for. The number and variety of processing options and special effects are quiet literally beyond belief.

If you can live with the less than inspired interface, and are will to invest the time and effort required to master its immense potential, ImageMaster is an essential addition to any serious artistic collection.

Montage

After many years as one of the leading exponents of hardware innovation, GVP have finally taken the plunge and released their first serious software release.

Unlike the two previous products, Montage has been designed to be an "all-rounder" capable of digital photographic retouching, scanner controller, 24-bit image processing, file format conversion and frame grabbing control.

All of this can be displayed either as 24-bit creations via display boards such as the IV24 or as reduced colour representations in standard Amiga modes – much in the same way as ImageMaster.

Now before we delve into the available features, it's worth stressing that the software on test is a pre-production version and as a result it would be unfair – and in some cases impossible – to draw direct comparisons between Montage and the other two packages. As a result, the following will simply list the features which are planned for the finished release.

Excellent

Aside from the options on offer, the most pleasing aspect of the package is the excellent interface which after ImageMaster comes as a real relief.

The interface again takes the form of a lower screen strip but the layout and design are much more friendly, although in part this is due to fewer available options.

It's obvious that GVP have done all they can to make the software as familiar to the average Amiga user as possible and as a result even a beginner will soon feel perfectly at home with the transition from standard Amiga graphics to the world of 24-bit art.

Just like ImageMaster and ADPro, 24-bit hardware is not essential as all graphics can be represented via standard Amiga displays even though the actual changes are applied to the hidden 24-bit master.

So, don't despair if your finances won't stretch to a enhanced display system as you can still apply its power effectively using a standard Amiga display.

The same applies to the software's scanning and frame grabbing options which can also display the imported imagery as standard Amiga graphics even though the internal data is true 24-bit.

The only real restriction regarding 24-bit data is the software's limitation to just two full images in memory as opposed to the unlimited number available within ImageMaster.

In addition, Montage also has space for an Alpha channel, undo buffer and brush buffers. Just Like a standard paint package, the two resident images can be flipped, copied and have brushes cut or pasted as required.

According to the accompanying bumf, Montage will in principle be capable of controlling all Amiga compatible scanners and frame grabbers.

Although some are already catered for such as the JX100 and the ES300C, I'm not convinced that such a grandiose claim will be possible, at least not before the software's initial release. Having said that though, GVP are not known for making promises they can't keep.

All the scanners will share a generic interface that will allow "previews" prior to full scanning and of course region boxes to define the scanning area, plus the usual assortment of options such as scanning resolution, landscape, portrait and so on.

Frame grabbing won't require the intricacies of the scanning interface but will benefit from Montage's ARexx interface which can be made to control interactive video players allowing the capture of entire sequences that could then be edited and sent to still frame recorders or alternatively converted into standard Amiga anims.

Due to Montage's virtual memory, options such sequences – or in fact any image – can be stored directly onto hard disk, optical or any form or removable media. The option can even be defined to automatically redirect output whenever the software detects a shortage.

Obviously this is going to be a big attraction to animators and those with limited available RAM. The only compromise is a noticeable but nevertheless bearable loss of speed.

Along with the wide variety of additional options, Montage offers an impressive ➤

Input and output

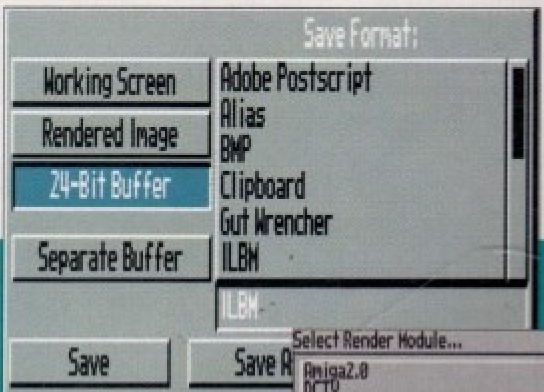
Before you commit your creations to disk you're offered a full selection of possible formats which include all Amiga formats included those designed for the Enhanced Chip Set, HAM-E and DCTV. There's also an impressive series of non-standard Amiga formats including TIFF, TGA and the all-important Adobe PostScript plus many more.

Unlike ImageMaster, Montage makes a serious challenge to ADPro's dominance as a multi-format interpreter, which further enhances its position as a jack of all trades.

When loading images Montage once more lends a technique first seen within ADPro. Rather than specifying a specific file format, the software uses its own version of ADPro's Universal loader, instantly importing any file format supported by the package.



The Montage scanning option all ready for action



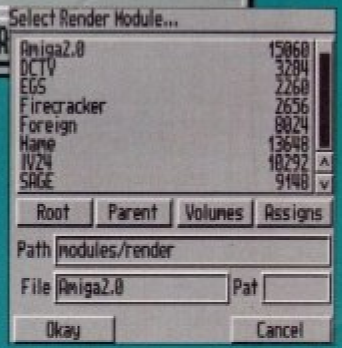
An impressive array of saving options in the style of ADPro, again courtesy of Montage



The montage render screen allowing you to view your 24-bit exploits via a standard Amiga display



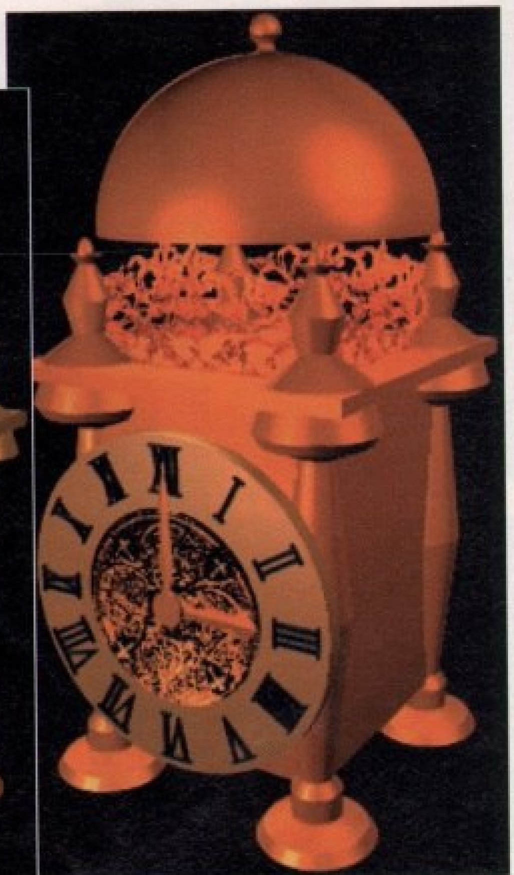
A quick system analysis courtesy of the montage info panel



A brief glance at some of the rendering options available via Montage



Yet another Alternative Image creation in its original form



The same image after a touch of instant ageing courtesy of the Antique option within Montage

selection of palette controls which allow you to combine various palettes and apply standard effects such as spreads, swaps, sorts and copies. The only worrying aspect concerns their actual application.

When the colour is applied to the canvas, the dreaded hospital green that haunts Macro paint and IV24 combination rears its ugly head once again.

Every time the paint is applied this nauseating colour is the one that actual makes the mark on the canvas and is only replaced by the selected colour after the stroke is complete. Even more worrying is the application of larger brushes. Not only do they draw in the infamous hospital green but they initially appear as a single pixel line which is then blown up into full size when the stroke is complete and the colour added.

If GVP want to market the paint package element of the system as a serious contender this particular problem must be addressed. What the application loses the Toolbox goes a long way towards making up for with a selection of familiar painting tools combined with a series of more unusual options which include ADPro style operators, special effects, brush and buffer controls, access to ARexx and the Alpha channel plus an impressive array of additional effects which include morphing.

It remains to be seen if the Montage version of morphing can match the performance of the ImageMaster variant mentioned earlier.

Alpha channels are essentially just another buffer, with the essential difference being that they are used to create smooth compositions between two images, which for example may have masked or gradiated elements in specific areas.

Montage allows for a 24-bit Alpha channel, so in theory transitions from one image to another within the same frame should be very smooth indeed.

The Alpha channel can also be used as a frisket or stencil which in effect temporarily marks the define area of the screen out of service allowing the application of paint and effects only to apply to the remaining areas.

The software has fairly extensive printing support direct from the software itself and can output both 12- or 24-bit images via intuition-based preferences along with Hewlett Packard PCL printing, direct encapsulated PostScript plus Group Three (G3) fax support.

All output can be either full digital halftone or alternatively sent using a variety of dithering methods.

Held up by your hardware?

RAM

No matter which IP package you invest in, there is a whole host of behind the scenes hardware which can be almost as important as the software.

Although all the manufacturers are at pains to stress that their packages will operate on near-standard machine it's almost impossible to get the best from such software without first a hard disk, some extra RAM and a respectable degree of acceleration.

The first and most essential element of the big three is RAM. Without at least 2Mb of memory most of the aforementioned software will not run at all. In the case of ADPro, 4Mb is recommended for any serious use.

Although ADPro's 4Mb operating minimum may seem a little extensive, that's just about par for the course among all three contenders, with Image Master being more than capable of eating as much RAM as you can provide thanks to its unlimited number of 24-bit buffers.

Acceleration

Although separate entities, there's a close relation between RAM and additional speed. In order to get the best from any accelerator that's to be employed primarily as an image engine you'd be well advised ensure that the unit comes with an FPU or floating point unit – also known as a maths co-processor – which is an essential addition when serious number crunching ensues.

For A1500 and A2000 owners and above, perhaps the perfect RAM and acceleration combination comes from GVP's Combo card which boasts an 030 CPU with either a 25, 33 or 40MHz FPU on-board, plus an option for up to 16Mb of 32-bit memory.

If you're an A500-based IP fan, GVP also have a market leader in the form of their new A530 hard disk and accelerator combination with the option for 8Mb of 32-bit RAM on-board – all housed in a single box which fits neatly into the side slot, just like GVP's original A500-HD+.

Armed with this little beauty, even an entry-level Amiga is capable of very impressive image processing. If you're willing to make a slightly larger investment an 040 accelerator is perhaps the ultimate choice with vastly enhanced speed over 030-based accelerators plus the usual array of FPU's ranging from 25, 28 or 33MHz.

To keep pace with the enhanced speed many of the 040's boast variable on-board RAM with additional daughter boards which can expand your available RAM to an almost unbelievable 100Mb in certain cases.

Until recently, 040s were solely the domain of the larger members of the Amiga family. However, at a recent show Progressive Peripherals and Software were offering their latest A500-based 040 for just £750, which in 040 terms is almost a freebie.

ARexx implementation

Although there has been little mention of ARexx throughout the article, all three packages use the language in various degrees, with both ADPro and ImageMaster relying heavily on it especially during animation, as indeed does Montage to a lesser degree.

In the case of ADPro, ARexx is the key to Fred, an additional program which comes as part of the package allowing the user batch process images ready for still frame recording or composition with others.

It also allows the application of operators and the mass conversion of files to other formats.

In the case of ImageMaster, ARexx is an essential in order to get the best from the program's multi-frame sequencing potential.

For those users conversant in the language, ImageMaster can become a 24-bit DPaint and much more besides, with animated effects that would leave even the most sceptical Hollywood mogul gasping for breath.

It's a real shame that none of the developers have made the effort to provide a method of producing automatically generated ARexx macros as part of their products. This would instantly eradicate the painful learning curve necessary to get the very best from their assorted systems.

The sooner software companies realise that serious animators, artists and multimedia users neither have the time, nor often the inclination to develop the ARexx skills their software requires, the sooner the Amiga will realise its true potential as an unbeatable graphics engine. Here endeth the sermon.

Montage overview

Although not a finished product, the existing software does give a good impression of the overall feel and undoubtedly points towards its potential place in the market.

If the painting problem can be addressed, GVP will almost certainly have another winner on their hands in the form of a general purpose 24-bit environment ideal for the general user who may require a wide variety of options at the drop of a hat.

As a multimedia workstation complement to the IV24 it's ideal, if perhaps a little out-gunned in the animation stakes by ImageMaster and to a lesser extent ADPro.

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Third time lucky?

Version 3 of the Amiga's wordprocessing Cinderella, Kindwords, looks suspiciously familiar. Stevie Kennedy tries it out

If you've been reading *Amiga Computing* for a while, you'll probably have noticed that we've never had a kind word to say about KindWords 2.

In fact, we've always said KindWords 2 is one of the slowest, most bug-ridden wordprocessors available for the Amiga, so what, you may be asking yourself, has changed with version 3?

The answer is everything. KindWords 3 is an entirely new program, so completely unrelated to its unfortunate ancestor that chalk and cheese do not offer a sufficient contrast.

The program was coded for The Disc Company by Digita International, producers of Wordworth, and when it loads you could be mistaken for thinking that you are in fact using the Digita product.

Kindwords 3 opens on a screen well-nigh identical to Wordworth, from the ruler bar to the toolbox on the left of the text area, and as you explore the menus the similarity continues.

Resemblance

All the familiar options are in their usual places, the important screens for preferences, page layout and so on bear more than a striking family resemblance to their Wordworth counterparts, and even the default font could sneak in unnoticed at the back of a Digita wedding photo.

Though obviously based on Wordworth's basic code – Digita deny it, but KW3 was written by the same programmer and is copyright Digita International! – and more of a marketing exercise than a new wordprocessor, KW3 manages quite nicely to fill a niche of its own.

The first thing most old KindWords 2 owners will try is to open a document previously saved using the original program, and this is possible through the Open Format option for IFF text (the type used by KindWords 2). However, the options to load WordPerfect, ProWrite, and Protext documents found in Wordworth do not appear in KW3. The restriction is also found in the Save Format options, such that the KW3 owner will have to be content with loading and saving in KW3 – or Wordworth – format, Ascii, or IFF text.

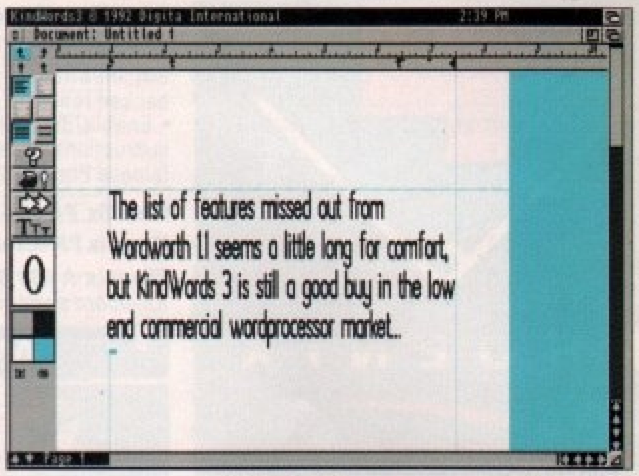
There is no specific option to load or save documents which include IFF pictures in KindWords format, but the program will accept these and convert them, thus assuring a 100 per cent compatibility with old KindWords documents.

Other missing Wordworth features include several of the neat – and sometimes useful – extra touches which give Wordworth its edge in the wordprocessor battle. Auto-save has taken a dive, along with page preview, the screen saver, and PostScript support among the useful features, and playtime, open new Shell, and the facing pages option among the more frivolous.

What really annoyed me was the lack of an insert literal option. This is invaluable if you need a character which is hidden below a huge finger-cracking key combination, and can save a lot of messing about when writing documents including foreign words or scientific terms.

In addition, those who type a lot of standard letters will rue the lack of a glossary of standard phrases, though it's not something I'll miss much myself.

Possibly the most innovative feature of the original Wordworth was its comprehensive support for the built-in fonts found in many popular printers. By supplying a huge range of printer drivers for specific printers, Wordworth was able to offer mouse control over one of the trickiest aspects of getting the most from your printer.



KindWords 3 has an uncanny resemblance to Wordworth, doesn't it?

KW3 has no such option, and in conjunction with the lack of PostScript support, this places the program well below Wordworth in the printing stakes.

Not all is negative, however, and to compare KW3 solely to Wordworth is a mistake. We've looked at what separates the program from its sibling, but possibly a more valuable exercise would be to compare it to its rivals.

KW3 will make most of the low-end Amiga wordprocessors look pretty pale by comparison. With the exception of ProWrite, whose artificial price cut is so obviously designed to produce some sort of UK market penetration, the opposition can offer little of KW3's user-friendliness and almost none of its modernity. Just in case future users feel like moving on, there will be an upgrade option allowing them to move onto Wordworth 1.1 or perhaps Wordworth 2.0, planned for release later this year.

The Disc Company, for so long suffering under the yoke of a program which was advanced for its time but which soon fell by the wayside (KW2) has taken the easy way out and opted for a variation on an existing and popular theme.

KindWords 3 may look like a simple marketing exercise, but it is a good wordprocessor which benefits from the best features of Wordworth while lacking only those you would expect considering the price difference. AC

Product information

KindWords 3 is a product of
The Disc Company
Supplier: Profile
Phone: 0926 815855
Price: £49.99

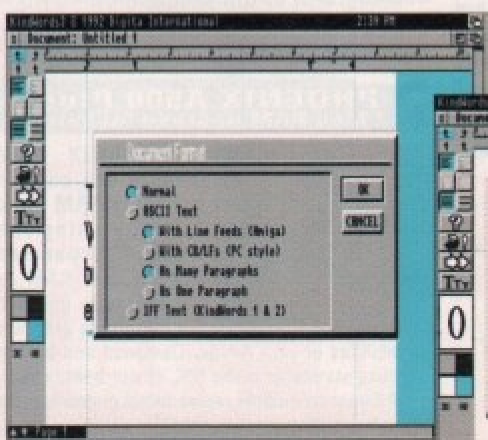
The casualties

Features found in Wordworth 1.1 but not implemented in KW3 include:

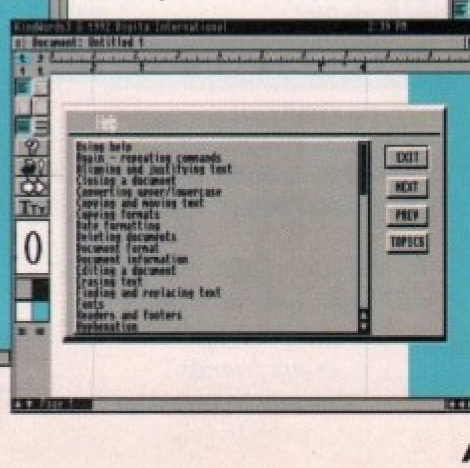
Auto-save	Playtime
Text to speech	Screen saver
Revert to last saved	Open new Shell
Print preview	Quick screen
Facing pages	PostScript support
Insert literal	Glossary

In addition, there aren't as many measurement systems to choose from, printer fonts are not supported, and there are fewer load and save options.

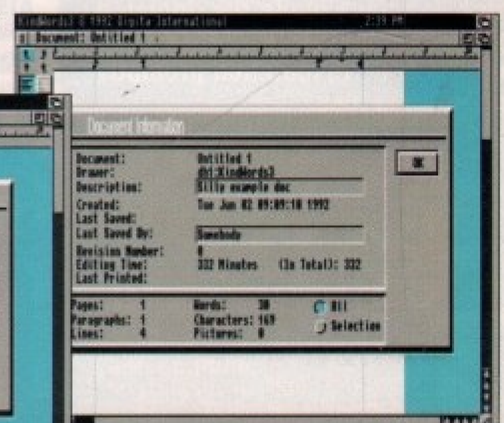
This may sound like a fairly damaging list, but when you consider the feature-packed start the program had (Wordworth 1.1) it appears less so.



Save and Load options have been drastically curtailed



The Help command functions in exactly the same way as Wordworth's and makes up for KW3's minute manual



Don't know about you, but I've forgotten which WP I'm using

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CHIPS

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AMIGA CUSTOM CHIPS

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*This price is for 1 Mb of RAM

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(*Uses 256x4 Zips)

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TAKE 2.................................... £42.99
A must for computer artists and enthusiasts of any age. • Traditional animation • Story boards • Product • Presentations • Home Line Tester • Cartoon Productions (both visual and sound).

ROCGEN Plus..........**ONLY** £129.99
Quality features and performance-Recommended.

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Disk Box 100 Cap	£6.99
Disk Box 120 Cap	£7.99

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P. Gallup~Ryde

PHOENIX PRODUCTS

MOUSE/JOYSTICK SWITCH — £13.99
Don't damage your Amiga's ports! This device saves wear and tear makes switchover *FAST*, and does **NOT** require power unlike many others.

COMPUTER/VIDEO SCART SWITCH — £19.99
Flip between Video/computer signals at the push of a button.

AMIGA MUSIC

Attention all you music lovers! Phoenix have put together an unbeatable music deal for you this summer.

MUSIC-X Jnr........only £15.00
When purchasing either a PhoenixStereo Sampler or Pro Midi 2 Interface
Please Note: this is a limited offer only while stocks last!

STEREO SAMPLER — £34.99
Combines ease of use with state of the art analogue to digital conversion technology.(inc. **FREE** sample editing software +audio lead)

PRO-MIDI 2 INTERFACE — £24.99
This fully featured professional quality midi interface is very flexible giving semi-patch bay facilities. It has five ports in, out, thru and two switchable out/thru. (inc. **FREE** midi lead)

GVP DIGITAL SOUND STUDIO — £54.99
High quality sound sampler for all Amiga Computers
Amiga Music Made Easy-Only from Phoenix!

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(Rechargeable)

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PHOENIX Kickstart ROM Sharer

Because some older games and business software will not run on the new Kickstart 2.04 ROM. PHOENIX have designed a sharer for both ROM chip sets. Switchable between 1.3 and 2.04 you can get all the benefits of the latest A500 Plus without the drawback of losing all your old software. Fits any Amiga 500/1500/2000.



*Kickstart ROM Sharer	£24.99
*Kickstart Rev 3/5 ROM Sharer	£27.99
*Keyboard Switchable ROM Sharer	£34.99
Kickstart 1.3 ROM	£29.99
Kickstart 2.04 ROM	£34.99

*(ROM Chips not included)

"Dear Sir, I am Writing to thank your company for the help shown to me recently, when I purchased the Phoenix ROM Sharer"
R. W. Cooke~ Milton Keynes

TRAIL BLAZERS-WHAT'S NEW IN AUGUST 1992!

In this month's new "TRAIL BLAZERS" section we spotlight some of the best new products and peripherals currently available for the Amiga.

ROMBO VIDI AMIGA 12..£94.95
(for details see below/opposite)

PHOENIX 1Mb A600 UPGRADE



Simply the Best !

EPSON GT-6000 FLAT BED FULL COLOUR SCANNER-Plug into Amiga parallel port scan documents as a resolution of up to 600 dots per inch in up to 16 million colours
Phoenix Price — **£989.00**

ASDG-SOFTWARE-Scanning controller software comes in two forms, integrated into art development as a new module or used as a stand-alone programme-Save scans direct to disk-
Phoenix Price — **£109.99**

ROCKEY BY ROCTEC-The new chroma key unit - used in conjunction with a Genlock - allows you to superimpose live video over graphics or video-substitute the brightness portion of a video source with a keyed image-Embed live video in graphics!
Phoenix Price — **£299.99**

LEADS & CABLES

Midi-Midi 2m	£3.99
Midi-Midi 3m	£4.99
Midi-Midi 5m	£5.99
Amiga-Scart	£9.99
*Amiga-RGB	£9.99
Joystick ext.	£4.99
Joystick splitter	£4.99
*Serial/Modem	£9.99
Printer 1.8m	£5.99
Printer 2.0m HQ	£7.99

*Call technical for complete listing

DISKS

Don't confuse these quality disks with others currently available. 3.5" 100% certified error free 70% clip. All disks include **FREE** high quality Phoenix labels.

10	£4.99	200	£72.99
25	£12.99	500	£174.99
50	£22.99	750	£259.99
100	£39.99	1000	£339.99

TDK Branded disks- High performance media from the experts-box 10 with labels.

10	£5.99	100	£52.99
50	£26.99	500	£189.99

1000 Disk Labels — £9.99

AMIGA RELEASE 2

Now Only..



£79.99

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4 DOMARK GAMES

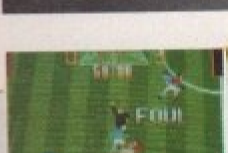
Four complete games from top software house Domark that will keep you entertained for eons! Catch those criminals and lock them away for good in Domark's fantastic police car chasing game, APB. Jump some jumps and loop some loops in in the brilliant stunt car racing game, Hard Drivin'. Klax is a puzzle game guaranteed to give you sleepless nights. Bond is back in the arcade spectacular, Licence to Kill.



ACCESSORY KIT

The essential accessory kit for Amiga owners. Make sure your mouse runs smoothly, your disk drive head is clean and your computer doesn't collect harmful dust. This quality kit from MD Office Supplies comprises mouse mat, head cleaner and dust cover and, as a further treat, we're including five quality 3.5 in floppy disks.

*Subscribe and choose either of these superb FREE gifts**





Exclusive Subscribers' Draw

Every Amiga Computing subscriber automatically qualifies for this month's brilliant draw for this exclusive special offer.

This Month's Prize

In this month's draw, four lucky readers will win a copy of the recently released Euro Football Champ, retailing at £24.99. The game is played from a grandstand point of view. You select from a number of international teams and pitch them one against the other in a knock-out until the finals are reached. The action is fast and realistic with all the usual moves combined with a few new features. It's absolutely ideal for armchair footie fans everywhere.

Congratulations to Mr N Hare of Kings Langley, Herts, on winning a copy of PIXmate, the image processing package from Progressive Peripherals in our July issue draw.

SUBSCRIPTION HOTLINE

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SEE 6

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Four games from Domark	9545 ☐

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Music for the masses

Composing and playing your own tunes is cheap and easy with the Amiga. Paul Overaa looks at what software is on offer

Making music is a satisfying pastime, and if you are new to the Amiga music scene you'll be pleased to know that it is not necessarily going to cost you an arm and a leg.

To get into the world of sampling you will need some digitiser hardware with suitable software to control it – most of the Amiga sampling packages include both. Getting into Midi will be a little more expensive but even a modest investment in a synthesiser, a Midi interface, and some sequencing software will open up fascinating new possibilities.

Connecting up a simple Midi system essentially means linking together a sequencer, synthesiser and a Midi interface, and it couldn't be easier.

Firstly, connect the Midi interface to the Amiga's serial port connector. Then take one Midi lead from the Midi Out of the synthesiser to the Midi In of the Midi interface and connect a second cable from the Midi Out of the Midi interface to the Midi In terminal of the synthesiser.

Switch the Midi equipment and your Amiga on, load the sequencer program as per the manual instructions, and you'll be home and dry.

Upper hand

In the following pages you'll find a selection of products and prices for many of the popular Midi/music offerings. With some items, such as samplers and Midi interfaces, there are now so many similar units around that we could have filled our space twice over!

In these cases we've opted for just providing – hopefully – a representative selection, and that's given us room to include details of a number of less publicised Midi/music-related offerings.

As far as our prices go, one word of advice – use them only as a guide because, in the current economic situation, things are changing almost daily. Don't forget that you – the purchaser – have definitely got the upper hand so make the most of this and hunt around for the best deals!

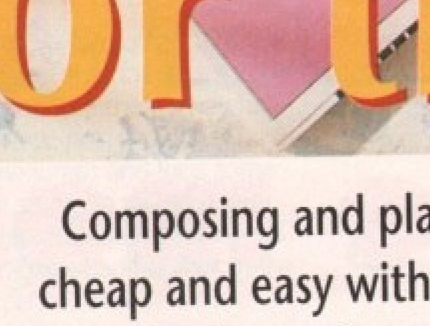
Sequencing and Composition Packages

Bars & Pipes Professional

Blue Ribbon Soundworks

Available From Zone Distribution

Price: £299



A superb sequencer and music-composition tool. Bars & Pipes has been specifically designed to be an open-ended Midi sequencer and in many cases adding new effects and expanding the sequencer's facilities is just a matter of adding some new B&P tool.

Bars & Pipes Add-On packages

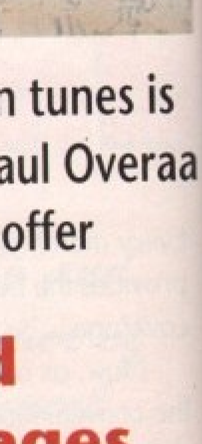
Blue Ribbon Soundworks

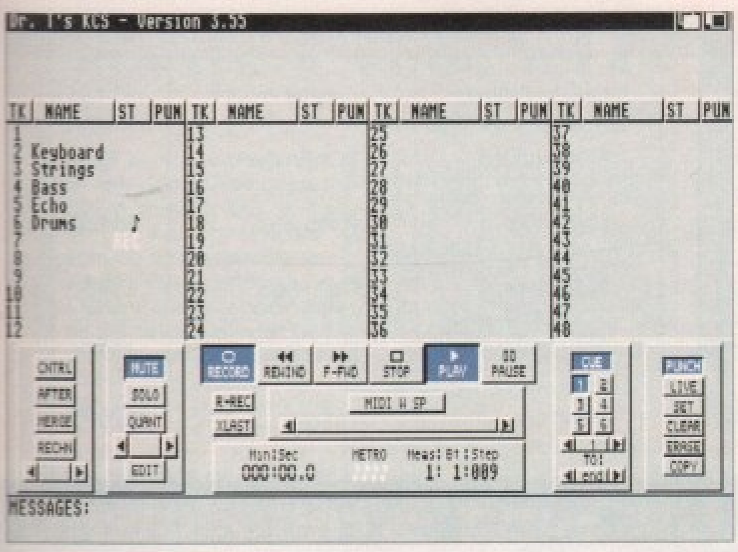
Available From Zone Distribution

Price: £44.95

A whole range of these add-on packages exist providing internal sounds, multimedia add-ons, sound effects tools, programmer guidelines and so on. Each consists of a temporary folder containing one or two disks and any necessary loose-leaf documentation.

To incorporate the new software you just copy the new facilities to their respective ToolBox and Accessory draws and add the new documentation to your main manual.





The friendly screen display of Dr T's KCS

SuperJAM

Blue Ribbon Soundworks

Available from Zone Distribution

Price: £99

The Atari ST has a number of programs – such as FreeStyle and Band In A Box – that, when supplied with suitable chord and style directions, can create accompaniments consisting of basslines, drum parts and keyboard riffs, with any number of variations and fills.

At long last a similar piece of software, called SuperJAM, has appeared on the Commodore Amiga, It will run on anything from a 1Mb A500 upwards. SuperJAM can drive either internal Amiga sounds or external Midi equipment and is absolutely brilliant.

KCS Level II v3.5

Dr T's Music Software

Available from Zone Distribution

Price: £279

Package includes the KCS v3.5 sequencer, the Dr T PVG program and a Master Editor.

Also provided are Tiger, the graphic editor, QuickScore – which allows the display and printing of sequenced music in traditional score form – and AutoMix which lets you perform automated mixdowns. All of these components are integrated into Dr T's multi-program environment (MPE) which provides the framework for inter-module communications.

The MPE system has eliminated the need for storing data in temporary files by allowing programs to communicate directly.

In short it lets you combine sequencing, scoring, patch editing, SMPTE synchronisation etc, from a single environment and this can turn the Amiga into a truly integrated Midi workstation.

Sequencing/ Composition Packages

Product name	Description	Available from	Price
Copyist Apprentice	Dr T's Music Software	Zone Distribution	£99
Copyist DTP	Dr T's Music Software	Zone Distribution	£229
Deluxe Music Construction Set	Electronic Arts	SoftStore	£49.99
Music Mouse	Dr T's Music Software	Zone Distribution	£59
Music X 1.1	Microlllusions	Dynamite Computing	£49.99
Music X Junior	Microlllusions	Dynamite Computing	£19.99
Overture	Desert Software	Desert Software	£79.95
Pro 24 Amiga	Steinberg	Evenlode Soundworks	£285
Tiger Cub	Dr T's Music Software	Zone Distribution	£99

Sequencer One Plus

Gajits

Available from Gajits

Price: £49.95

An upgraded version of the original Sequencer One. Among the many new facilities is a filter option that solves the Midi-echo problem found with some Yamaha PSS synth models. Good value for money.

Sampling and Sample Editing Software

AMAS 2

Microdeal

Available from Microdeal

Price: £99.95

This hardware/software sampling package includes a Midi interface and a microphone.

Sample Series

Gajits

Available from Gajits

Price: £9.95

Range of high-quality IFF samples for use with music programs. Percussion & Effects, Guitars & Strings, Brass & Woodwind.

Audio Engineer Plus

RamScan

Available from Trilogic

Price: £169.99

Hardware/software sampling package – the best Amiga sampler available.

Techno Sound

New Dimensions

Available from Trilogic

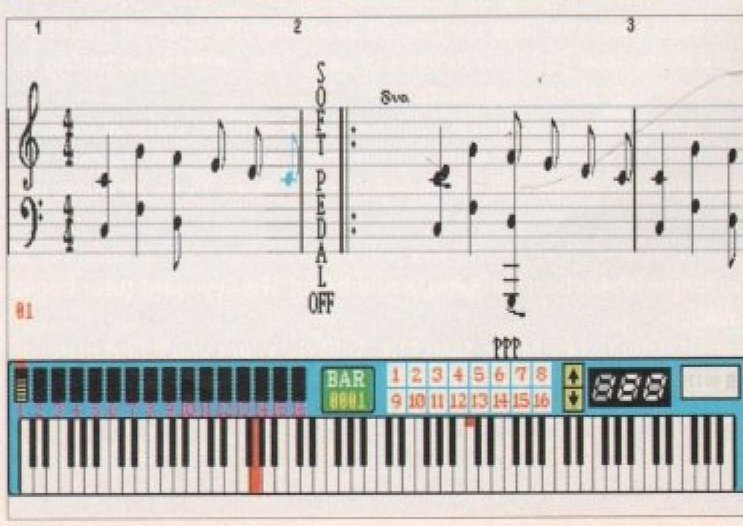
Price: £31.99

Cheap, but reasonably well designed, hardware/software sound sampling package.

Product name	Description	Available from	Price
Audition 4	Ramscan	Trilogic	£37.49
Beat Studio	City Beat	City Beat	£39.95
Pro Sound	Designer Gold	Power Computing	£39
Sound Trap 3	Omega Projects	Omega Projects	£30
Stereo Master	Microdeal	Microdeal	£39.95

Librarians/Patch Editors

Product name	Description	Available from	Price
CZ-Rider	Dr T's Music Software	Zone Distribution	£89
DX-Heaven	Dr T's Music Software	Zone Distribution	£89
4-OP Deluxe	Dr T's Music Software	Zone Distribution	£89
VZ-Rider	Dr T's Music Software	Zone Distribution	£89
4D Companion Editor Librarian	Gajits	Gajits	£99.95
CMpanion Editor Librarian	Gajits	Gajits	£99.95
X-OR	Dr T's Music Software	Zone Distribution	£219



Musical scores can still be produced by some packages

Miscellaneous hardware

Datel Midi Interface

Datel

Available from Datel

Price: £30

One of the many interfaces now available for the Amiga. Datel also offer a micro-Midi version which costs less than £20.

FT3 Patch Commander Plus 2

Forefront Technology

Available from BCK Products

Price: £79.99

The FT3 patch commander is a hand-held, battery-powered unit intended for use as a general Midi remote controller. It has nine different modes of operation.

It will function as a patch command transmitter which can transmit a patch message on any (or all) Midi channels and has system and channel filter modes which enable you to filter unwanted Midi messages from your Midi data. The FT3 also includes a Midi clock generator and a Midi lead tester.

MA36 Midi Analyser

StudioMaster

Available from StudioMaster

Price: £28

This is about the same size as a guitar tuner, has an on/off switch, can be battery or mains-adapter powered and has two Midi sockets, namely Midi In and Midi Thru. The MA36 reads Midi data as it passes through the unit, identifies it, and then displays the results on a set of LEDs.

To use it you just plug the MA36 into the Midi line and look at it – it really is as simple as that. The right-hand side of the MA36 display is a bank of channel indicators. These enable you to tell immediately what Midi channels are being used.

As you play notes on a keyboard or whatever, the left-hand side of the display bursts into life displaying details of what messages are passing through the MA36.

3M Midi Merge Unit

Philip Rees

Available from Philip Rees

Price: £99

Another gadget that has arrived recently, this three-input Midi merge unit can handle all types of Midi data – including MTC time code – and will also cope with SysEx messages of any length. The unit has thru ports for two of its inputs plus a port for the merged output.

5x5 Midi Patchbay

Philip Rees

Available from Philip Rees

Price: £99

This lets you switch select the routing configuration of a number of Midi inputs and outputs. The 5x5 controls five Midi Ins and five Midi Outs and its primary use is to eliminate the constant plugging and unplugging of leads when using different Midi units.

It can of course also function as a "user configurable" thru box. When you arrive at the stage where you are really getting into Midi and are starting to collect a growing array of Midi equipment you'll find that patchbay units come in very handy.

MLD Driver Units

Philip Rees

Available from Philip Rees

Price: £89.95/pair

Because of the way that Midi data is transmitted, Midi cables have an effective reliable maximum working length of 15 metres.

This, for most users, does not create any problems, but there are applications – such as the remote control of musical equipment from an off-stage position – where the ability to use long cable runs would be an advantage.

Philip Rees have recently announced this line driver system which effectively eliminates the 15-metre Midi limit altogether. These MLD Line Driver units convert the Midi signals into a balanced differential signal that can then travel up to 1,000 metres.

The cost of a pair of such units – a transmitter and a receiver – means that they are destined primarily for professional Midi music applications, but they might be just what you need if you are using Midi for some more general remote control applications!

Product name	Description	Available from	Price
Sound Enhancer	Omega Projects	Omega Projects	£34.95
MD80 Thru Box	BCK Products	BCK Products	£34.95
v3 Thru Box	Philip Rees	Philip Rees	£14.95
v10 Thru Box	Philip Rees	Philip Rees	£39.95
W5 Dual Input Box	Philip Rees	Philip Rees	£39.95
Midi Interface 2	Trilogic	Trilogic	£26.99

Music Teaching Guides

SFX Books

Wise Publications

Available from Music Sales

One of the biggest music teaching improvements seen over the last few years has been the introduction of the SFX keyboard tutor and song books.

SFX notation is based on the well-established scheme of providing a melody line for a song coupled with shorthand chord symbols. SFX however goes further in that note names are written inside the notes – which makes it easy to work out melody lines – and awkward key signatures are avoided.

Notes which need sharps or flats are treated as accidentals and you therefore see all necessary sharps and flat signs in front of each note rather than having to imply their existence from the key signature.

The range of the SFX song material is substantial and includes classical themes, show music, country, pop and jazz with a great many artist-specific books. The songbooks which include words cost £3.95 and contain about 15 to 20 songs per book.

Each SFX book contains chord charts and notes on reading musical notation. If you need extra help with keyboard playing, a number of SFX keyboard tutor books are also available.

SFX books are distributed by Music Sales Ltd. As likely as not you'll find many of them in local music stores but they can also be ordered directly.

To obtain a current catalogue you will need to write to Music Sales Limited, Newmarket Road, Bury St Edmunds IP33 3YB and include £1.50 for postage and packing.

Midi File Song Arrangements

Nowadays a number of companies offer a whole range of material on Amiga format disks but to be honest this, for the Amiga user, is neither here nor there.

Utilities like CrossDOS, which can read and write PC and Atari ST format disks, have made the physical copying of files from PC/ST disks to Amiga disks simplicity itself.

GIG/Masterclass Arrangements

Hands On Midi Software

Available from Hands On Midi Software

Hands On offer a range of GIG (chart) and MasterClass (classical) sequences. The current GIG library alone has over 250 titles including jazz standards, chart material, 60s music, TV and film themes and country hits. Any four chart hits – or two classical works – will cost £22.95 (plus £1.50 p&p).

A demo disk or tape is available for £5.50 (plus p&p) and this is refundable against subsequent purchases.

Midi Sequences

Stage One Computers

Available from Stage One Computers

Excellently programmed rock, country music, 60s songs and up-to-date chart material. If you are interested in drum programming you might like to know that the Stage One volume I drum library contains over 700 different drum patterns and volume II contains another 600 patterns!

Contacts

BCK Products	0708-448799
City Beat	0234-857777
Dynamite Computing	0234-214212
Desert Software	051-430 7400
Evenlode Soundworks	0993-898484
Gajits Music Software	061-236 2515
Hands On Midi Software	0705-221161
HB Marketing	0753-686000
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Music Sales Ltd	071-434 0066
Omega Projects	0925-763946
Philip Rees	0608-811215
Power Computing	0234-843388
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StudioMaster	0582-570370
Trilogic	0274-691115
Zone Distribution	071-738 5444

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A600HD
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PLEASE NOTE...
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PROFESSIONAL QUALITY GENLOCK FOR COMPUTER AND VIDEO MIXING, AT A DOWN TO EARTH PRICE!!!

Please note the above photograph shows Spectracolor which has now been replaced by Photon Paint 2.0

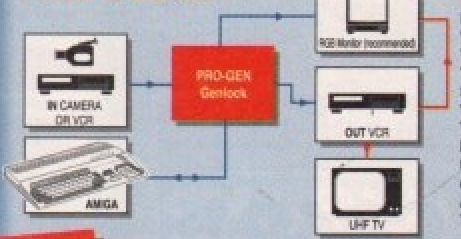
PRO-GEN Amiga Genlock

The Pro-gen AMIGA Genlock allows you to mix your Amiga display with any PAL video signal whether it is from a VCR, Laserdisk player or a Camcorder. In fact any item of video equipment which outputs a PAL composite video signal.Combined with the Amiga computer the Pro-Gen gives you the facilities of a special effects & video titling suite. Take your own films & give them a professional look by OVERLAYING TITLES or by SUPER IMPOSING YOUR OWN GRAPHICS created in packages like Photon Paint 2.0 or Deluxe Paint. Pro-Gen is supplied with micro illusions superb Photon Paint 2.0 package.

FREE Photon Paint 2.0 Software

A powerful Lo-and-Hi resolution hold and modify (HAM) paint program, with overscan (NTSC/PAL) and special effects for your Amiga Computer including all the following... **Contour Mapping:** drapes a brush over a 3D "landscape". Pixel intensity values decide the peaks and valleys, while a specially developed ray-tracing algorithm maps the image precisely. **Surface Mapping:** around 3D objects, both geometric and free hand drawn. **Luminance:** sets the light source and intensity. **Shadowing**: automatically with control of size and offset. **Brush Control:** twist, tilt, resize, flip, rotate, bend, adjustable transparency, stretch etc etc. PLUS LOTS MORE! A great program allowing use of 4096 colours. Choice of horiz/vert page print, negatives, anti-aliasing, dithered print, adjustable brihgtness etc.

How it works:



STOP PRESS

PRO-GEN... NOW INCLUDES A VERY VERSATILE MULTI COMPONENT VIDEO TO GENLOCK CONNECTING CABLE KIT. THIS ALLOWS PRO-GEN TO BE USED STRAIGHTAWAY WITH MOST POPULAR VIDEO EQUIPMENT, WITHOUT THE NEED TO HUNT DOWN THE CORRECT CONNECTING CABLES. THIS KIT CAN ALSO BE USED TO CONNECT IN OTHER WAYS... eg. VCR TO VCR etc.
A KIT TO START YOU OFF RIGHT FROM THE MOMENT YOU OPEN THE BOX!!

NEW LOWER PRICE

PRO-GEN with Photon Paint 2.0 ONLY £89.95

Mode Switch-box for Genlocks

Features Include
- Compatible With The Pro-Gen And Rendale 8802
- Supplied With Genlock Extender Cable Worth £9.95
- Switch-box Switches Between Foreground, Background, Video And Computer Modes.

£29.95

**Finance terms are available (subject to status) for most products; please see our ordering panel at the end of this advert for full details*

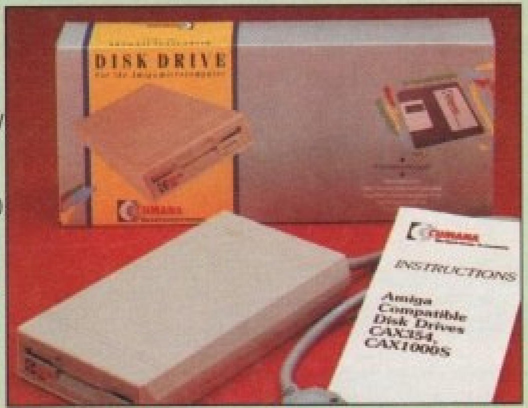
AMIGA DRIVES & MEMORY

Cumana CAX354 3.5" External 2nd Disk Drive.

- ☆ Features Include
- ☆ Long connecting cable
- ☆ 1Mb, (880K Formatted) Capacity
- ☆ Enable/Disable Switch,
- ☆ Throughport
- ☆ Access Light
- ☆ Compatible with Amiga500/1000 1500/2000/3000 and CDTV

NOW SUPPLIED WITH A FREE 3.5" Disk Head Cleaner to maintain your new drive in 'tip-top' condition.

£54.95



GVP 52-420Mb HARD DISK DRIVES WITH MEMORY EXPANSIONS OF UP TO 8Mb.

- ☆ Capacities of 52 to420Mb
- ☆ Connects to sidecar bus on L/H side of A500/A500 Plus
- ☆ Autoboots with Kickstart 1.3/2.0, boot enable/disable switch
- ☆ Sockets for up to 8 Mb of RAM
- ☆ SCSI Port allows up to 7 other devices to be connected
- ☆ Supplied with easy to use software
- ☆ 2 Year Warranty ☆ Dedicated PSU
- ☆ Mini slot for future expansion
- ☆ PC-AT Emulator planned to be available for 1992

GVP AMIGA A500 HARD DRIVES

RAM SIZE	CAPACITY 52Mb.	120Mb.	240Mb.
0Mb.	£349.95	£459.95	£729.95
2Mb.	£419.95	£529.95	£799.95
4Mb.	£489.95	£599.95	£869.95
8Mb.	£629.95	£739.95	£999.95

GVP AMIGA 1500/2000 HARD DRIVES

RAM SIZE	CAPACITY 52Mb.	120Mb.	240Mb.	420Mb.
0Mb.	£289.95	£409.95	£639.95	£1169.95
2Mb.	£359.95	£479.95	£709.95	£1239.95
4Mb.	£429.95	£549.95	£779.95	£1309.95
8Mb.	£559.95	£679.95	£899.95	£1429.95

CALL FOR MEMORY UPGRADE PRICES IF YOU ALREADY ARE A GVP OWNER!

EDUCATION SOFTWARE

DON'T JUST PLAY GAMES WHEN YOU CAN LEARN WITH YOUR AMIGA TOO!

MICRO MATHS - 24 easy to use programs for GCSE ('O' Level) revision or self tuition £18.95

MEGA MATHS - A 9 level step by step tuition course. For mature beginners, 'A' Level studies & Micro Maths users £20.95

MICRO FRENCH - GCSE French tuition or revision course. Covers both spoken & written French £18.95

MICRO ENGLISH - Complete self-tuition programe to GCSE level. £18.95

PRIMARY MATHS - Ages 3 to 12, Complete 24 Prog. Course. £18.95

SPELL BOOK - Ages 4 to 6, Developed with the help of a Primary School Head Teacher to aid spelling skills. £17.95

HOMEBASE - Home storage prog., ideal for those household lists, childrens educational projects, student notes etc. Easy to use "Push Button" controls and a extensive reference manual. £19.95

COMPENDIUM SIX PACK- 6 Great Educational Progs. for children aged 4-12years of age. Each is designed to keep your childs interest whilst they learn. **KIDS TYPE** - Large characters & colurful graphics helps creation of stories. **WEATHER WATCHER** - Collect & analyse data using graphs etc. even animate your own weather map! **CALENDAR QUIZ** - Quiz based learning of time related events. **WORDS AND NUMBERS** - Put words & scentences in the correct order or group numbers. **GAME, SET & MATCH** - Early learning of shapes colours, numbers, coins, sequences and including a "reaction timer". **WHAT IS IT? WHERE IS IT?** - Learn names & locations of British counties. £29.95

HARWOODS AMIGA 1Mb PRO-RAM PLUS

ADD MORE POWER TO YOUR AMIGA 500 PLUS WITH A FULL 1Mb. MEMORY UPGRADE!!!

- ☆ 1Mb. RAM expansion for the Amiga 500 Plus
- ☆ Gives a total of 2Mb. of RAM
- ☆ Easily fitted without any dismantling in the trapdoor expansion slot underneath Amiga. DOESN'T invalidate your warranty!
- ☆ Low power consumption ☆ 2 Yr Guarantee!

A GREAT NEW OFFER FROM HARWOODS

Only... **£34.95**

0.5 Mb PRO-RAM

- ☆ Compatible with Amiga A500 and 500 Plus
- ☆ Gives A500 a total of 1Mb Memory + Clock
- ☆ Gives 500 Plus a total of 1.5Mb Memory

Only... **£29.95**

AMIGA SOFTWARE

Music-X: The ultimate software for professional MIDI sequencing. The software includes a configurable librarian and a synthesiser patch editor. All you need to recreate a song can be recalled from one performance file including sequences, MIDI routing, sync setup, keyboard maps & synthesiser or drum machine patch libraries. **NEW LOW PRICES - £49.95 or just £69.95 with midi-interface!**

MIDI INTERFACE (5 Port): In, Out, Through plus 2 switchable thru'/out. Inc. 2 cables. £24.95

AMOS: AMOS allows you to access the power of the Amiga with ease. 500 different commands make AMOS a sophisticated development language. The AMOS animation language allows you to create complex animation sequences. 300 page manual and over 80 example programs £49.95

Amos Add on Modules: (BOTH require Amos prog.)
Amos Compiler £29.95 Amos 3D £34.95

BUY ALL THREE AMOS PROGRAMS FOR JUST **£89.95**

SuperBase 4: Most powerful database available for the Amiga.Combines the ease of use of Super-Base 2 with a versatile programming language so that you can tailor your data to your own specific needs for club/business/library records etc. £229.95

Lattice C: An ideal tool for the C programmer whether experienced or a novice. The best way to create applications for the Amiga.Fully supports Motorola chipset. Nearly 300 functions optimised to help the user write the tightest possible code. Includes screen editor. Most Amiga C books are based around lattice. (Requires either 2 floppy drives OR a hard disk drive) £199.95

Deluxe Paint IV: Latest version of the Amigas first, and still the best, paint and animation package, now including HAM mode. (1 Mb. minimum memory or more recommended) £79.95

Vidi, The Complete Colour Solution: Vidi with RGB Splitter, Frame Grabber & Digitiser. Grabs moving colour video into 16 grey scale frames (up to 16 frames in 1Mb. Amiga) and digitises from still colour video source in up to 4096 colours in less than 1 second! Requires home VCR or video camera for grabbing. Requires video camera or VCR with perfect pause for digitising. Now comes with Photon Paint 2.0 ABSOLUTELY FREE OF CHARGE!!! £149.95

STEREOMASTER: High quality "stereo" sampler (best for sampling instruments etc.) £39.95

THE ABOVE IS JUST A SMALL SAMPLE FROM OUR EXTENSIVE RANGE OF THOUSANDS OF SERIOUS, EDUCATION AND RECREATION TITLES.WE CAN'T LIST THEM ALL HERE SO PLEASE CALL US IF YOU CAN'T SEE THE PROGRAM YOU REQUIRE, IT'S PROBABLY IN STOCK!

Pen Pal V.1.3

WORD PROCESSOR/DATABASE

With Pen Pal you can mix text, 4096 colour graphics & data in ways no other w/p can! "It's handling of graphics is unsurpassed: Pen Pal is the only word processor I tested that will automatically wrap text round graphics..
Amiga World, July '90



£79.95

PEN PAL complete WITH 512K Amiga RAM Expansion ***only...£99.95!***

Amiga A600 range (A500 range may still be available to special order, please enquire)

Enquiries & Order Line:
0773 836781

Finance Facilities Available*
Please phone us for information and your personal application pack.

GORDON HARWOOD HARWOOD HARWOOD Computers
ALFRETON DERBYSHIRE

The Closer you look, The Better we look.

**Finance terms are available (subject to status) for most products; please see our ordering panel at the end of this advert for full details*

FREE... Fully Tailored Dust Cover with all Dot Matrix Printers

PRINTERS

FREE ACCESSORIES

All printers in our range include a standard Centronics/Parallel Port for direct connection to Amiga, PC's, Atari ST's, Archimedes etc.

We supply a connection cable to YOUR computer plus a Quality Dust Cover with ALL Dot Matrix Printers — FREE FREE



When you are comparing our prices to others make sure that the same essential items are included eg. Printer Lead, Dust Cover, Postage and VAT etc.

Now Available
New Canon BJ10EX Printer
ONLY £229.95

CITIZEN 120D+ 9 PIN MONO - Up to 120/25 cps — £134.95
- Very reliable low cost printer with interchangable interfaces for Centronics/RS232/serial type (C64 etc.)
- Full 2 Year manufacturers warranty

NEW FASTER STAR LC20 9 PIN MONO - Up to 150/38 cps — £154.95
Replacement for our most popular Mono Dot-Matrix at a super low price
- Multiple font options easily accessible from front panel
- Excellent paper handling facilities
- Simultaneous, continuous and single sheet stationery
- 240 x 240 dpi Graphics

STAR LC200 9 PIN COLOUR PRINTER - 185/40 cps — £199.95
This is the one in our packs!
- 80 Column Dot Matrix
- 240 dpi - 9 Pin COLOUR
- 16K Buffer, 8 Resident Fonts
- Push/pull tractor & rear/bottom feeds
- Reverse paper feeds
- Micro paper feed, Max. paper width 11.7"
- Supplied with colour & mono ribbons
- Paper park with auto single sheet loading
- Programmable from front panel.
- 12 month warranty

CITIZEN SWIFT 9 PIN COLOUR - 160/40cps — £199.95
New super high spec 9Pin colour printer
- 8K Buffer 4 Fonts
- Push and pull tractor built-in
- Feed for labels/multi part stationery
- 240 x 240 dpi Colour Graphics
- Best text quality in our 9Pin range
- 2 Year Citizen warranty

STAR SJ48 INKJET PRINTER — £239.95
New super high quality bubble ink jet printer
- 64 Nozzle ink jet
- Emulates Epson LQ and IBM Proprinter for full compatibility
- Complete with AC adaptor
- Large 28K Buffer
- 360 x 360 dpi near laser print quality
- Optional Ni-Cad battery for mains free operation

STAR LC24/200 24 PIN MONO - 220/55 cps — £239.95
Mono version of LC24/200 Colour, same spec except for a smaller 7K buffer

STAR LC24/200 24 PIN COLOUR - 220/55 cps — £289.95
Colour version of the LC24-200 Mono.
- 80 Column Dot Matrix
- 360 dpi - 24 Pin MONO
- 30K Buffer (expandable)
- 10 Resident Fonts
- Front Panel Pitch Selection
- Push/pull tractor & rear/bottom feeds
- Reverse paper feed
- Paper park with auto single sheet loading
- Micro paper feed, Max. paper width 11.7"
- Supplied with mono ribbon
- Faster than the old LC24-10
- Extra font cartridges available
- Program from front panel, No DIP switches
- 12 month warranty

NEW 24 Pin CITIZEN 224 COLOUR - 160/53 cps — £229.95
Brand New, lowest cost colour 24 Pin printer, anywhere!
- 80 Column Dot Matrix with 4 Fonts
- 360 dpi - 24 Pin COLOUR
- 8K Buffer expandable to 32K
- Easy to use front panel controls
- Push & pull tractor feeds
- Complete paper parking facilities.
- Supplied with mono & colour ribbons
- Full 2 Year Citizen Warranty

NEW 24 Pin CITIZEN SWIFT 24E COLOUR - 180/60 cps — £299.95
Brand New, superb specification colour 24 Pin printer.
- 80 Column Dot Matrix with 7 Fonts
- 360 dpi - 24 Pin COLOUR
- 8K Buffer expandable to 32K
- Easy to use LCD panel controls
- Push/pull & bottom tractor feeds
- Complete paper parking facilities.
- Supplied with mono & colour ribbons
- Full 2 Year Citizen Warranty

NEW FASTER STAR XB 24 PIN COLOUR RANGE XB24-200 & XB24-250 - 275/80 cps
£399.95 24-200 Colour — Wide Carriage **£499.95** 24-250 Colour
These NEW top of the range Stars replace the XB24/10 & XB24/15, & offer the best possible quality dot matrix printing
- Exceptional print quality
- 4 x 48Pin super letter quality fonts
- 14 x 24Pin near letter quality fonts
- Buffer: 29K(XB24/200) & 76K (XB 24/250)
- 360 x 360 dpi Colour Graphics
- 12mths on-site warranty (UK Mainland)

HEWLETT PACKARD PAINTJET COLOUR A4 INKJET — £579.95
Our best quality full colour printer at a realistic price
- Parallel/Centronics or Serial RS232 I/F (specify with order, MAC option available)
- For presentation graphics/DTP, CAD and technical/scientific applications
- A full page of colour graphics in 4 minutes (typical)
- Non impact printing, virtually silent, 43dba
- Will print transparencies
- 12 Months on-site warranty (UK Mainland)

STARSCRIPT - 4ppm POSTSCRIPT COMPATIBLE LASER — £999.95
A4 Laser Printer, will connect to PC, Amiga, Atari ST, Macintosh etc.
- 300 DPI, 2Mb. Upgradable to 5Mb.
- Emulations inc: HP Series II, Epson EX800, IBM Proprinter & Diablo 630
- Complete with "Starscript" (Stars postscript language emulation)
- Serial and Parallel Interfaces
- 12month on site warranty (UK Mainland)
- 49 quality fonts built-in
- Appletalk for connection to Macintosh
- Every desktop publishers dream

SEE OUR LIST OF ACCESSORIES FOR BOTH STAR AND CITIZEN PRINTERS, ALL AT COMPETITIVE PRICES!
All the characters Per Second speeds quoted above are Draft/LQ at 10cpi

PRINTER ACCESSORIES

CITIZEN PRINTER ACCESSORIES:

Citizen 120D+ Sheet Feeder	£69.95
Citizen 120D+ Parallel Interface	£49.95
Citizen 120D+ CBM C64 Serial Interface	£49.95
Citizen 124D 32K Buffer	£13.95
Citizen 124D Semi-Auto SheetFeeder	£39.95
Citizen 124D Automatic Sheet Feeder	£79.95
Citizen 124D Printer Stand	£24.95
Citizen Swift 9 Semi-Auto SheetFeeder	£39.95
Citizen Swift 9 Automatic Sheet Feeder	£79.95
Citizen Swift 9 Printer Stand	£24.95
Citizen Swift 9X Printer Stand	£34.95
Citizen Swift 9X Automatic Sheet Feeder	£139.95
Citizen Swift 24 32K Printer Buffer	£13.95
Citizen Swift 24 Semi-Auto Sheet Feeder	£39.95
Citizen Swift 24 Automatic Sheet Feeder	£79.95
Citizen Swift 24 Printer Stand	£24.95
Citizen Swift 24X Auto Sheet Feeder	£139.95
Citizen Swift 24X Printer Stand	£34.95

HEWLETT PACKARD PAINTJET PRINTER ACCESSORIES:

Hewlett Packard PaintJet	
Black Ink Cartridge	£24.95
Colour Ink Cartridge	£29.95
Single Sheet Printer Paper	£21.95
Z-Fold Printer Paper	£19.95
Transparancy Paper: Pack of 50 Sheets	£52.95

STAR PRINTER ACCESSORIES:

Star LC-20 Mono Printer	
Automatic SheetFeeder	£74.95
Star LC24-10 Mono Printer	
32K Buffer £67.95	£67.95
Automatic SheetFeeder	£74.95
Star LC-200 Colour Printer	
Automatic SheetFeeder	£74.95
Star LC 24-200 Mono/Colour Printers	
32K Printer Buffer	£34.95
Automatic SheetFeeder	£74.95
Star SJ48 Printer	
Automatic Sheet Feeder	£54.95
Ni-Cad Battery	£39.95
Star XB 24-200 Colour Printer	
Pull Tractor	£34.95
Font Cartridges - Styles To Be Announced	£29.95
128K Centronics Printer Buffer	£89.95
Automatic SheetFeeder	£114.95
Dual Bin SheetFeeder	£429.95
Star XB 24-250 Colour Printer	
Pull Tractor	£34.95
Font Cartridges - Styles To Be Announced	£29.95
128K Centronics Printer Buffer	£89.95
Automatic SheetFeeder	£174.95
Dual Bin SheetFeeder	£469.95

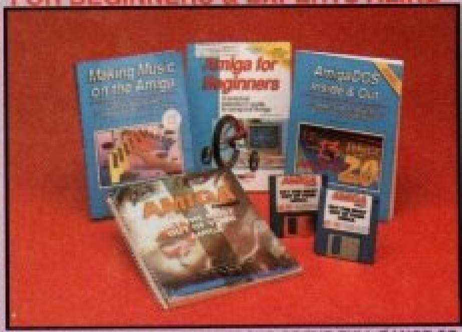


GENUINE CITIZEN & STAR REPLACEMENT PRINTER RIBBONS

PRINTER	PRINTER TYPE	BLACK RIBBON	BLACK RIBBON 'SIX PACK'	COLOUR RIBBON	COLOUR RIBBON 'SIX PACK'
CITIZEN 120D+	BLACK ONLY	£4.95	£24.95	N/A	N/A
CITIZEN 124	BLACK ONLY	£4.95	£24.95	N/A	N/A
CITIZEN SWIFT 9	BLACK/COLOUR	£4.95	£24.95	£16.95	£99.95
SWIFT 24/24E/224	BLACK/COLOUR	£4.95	£24.95	£16.95	£99.95
STAR LC10*/20☆	BLACK/COLOUR	£4.50*☆	£24.95*☆	£6.90*	£36.50*
STAR LC200	BLACK/COLOUR	£6.95 ZX9	£36.95 ZX9	£12.95 ZX9CL	£69.95 ZX9CL
STAR LC24/200	BLACK/COLOUR	£8.95 Z24	£49.95 Z24	£14.95 X24CL	£74.95 X24CL
STAR XB RANGE	BLACK/COLOUR	£8.95 Z24	£49.95 Z24	£14.95 X24CL	£74.95 X24CL
STAR SJ48 INK CARTRIDGE	BLACK ONLY	Also compatible with Apple Stylewriter and Cannon BJ10E Bubblejet			£15.95ea.

BOOK SHOP

FOR BEGINNERS & EXPERTS ALIKE



WE ALWAYS CARRY LARGE STOCKS OF THE FULL RANGE OF ABACUS & OTHER BOOKS...Phone us for details!

AMIGA FOR BEGINNERS - VOL. 1 ABACUS BOOKS, £12.95
From unpacking your Amiga to creating your own icons, includes first use of basic and extras disk. NEW revised version covering workbench 1.3 and 2

AMIGA BASIC INSIDE AND OUT - VOL 2 ABACUS BOOKS, £18.95
Definitive step by step guide to programming Amiga's in basic.

AMIGA MACHINE LANGUAGE - VOL 4 ABACUS BOOKS, £14.95
Practical guide to learning 68000 assembler language.

AMIGA DOS INSIDE AND OUT - VOL 8 ABACUS BOOKS, £24.95
Guide to Amiga DOS & CLI. NEW Edition inc. WB 2.0 (includes Free Help Disk)

AMIGA HARDWARE REFERENCE MANUAL-Addison Wesley, £21.95
Written by technical experts at Commodore Amiga Inc, USA... the people who designed your Amiga. Hardware level machine code programming at advanced level. New revision now also includes Kickstart 2.

AMIGA, BEST OF TRICKS & TIPS Vol. 17, £32.95
A complete set of tricks and tips that enable you to do MORE with your Amiga and as simply as possible. (Includes Free Disk)

GETTING THE MOST FROM YOUR AMIGA [without disks], £9.95
From Future Publishing, the producers of Amiga Format Magazine and fully updated for 1992 OR...
available with 2 HELP DISKS INCLUDED — £13.95

**Credit terms are available (subject to status) for most products; see our ordering panel at the end of this advert for full details*

OPTIONAL 10 GAMES AVAILABLE FOR JUST £10

MONITORS & MONITOR TV's

CM8833 INCLUDES F19 STEALTH FIGHTER

Harwoods stock a complete range of both Monitors & Monitor TV's to give you your perfect solution to the type of display to buy.



PHILIPS CM8833/II
Stereo High Resolution Colour Monitor

The ever popular 14-inch Philips CM 8833 MkII. Its versatility means you not only get excellent colour graphics & text performance with a wide range of personal computers, but when connected to a VCR, you get an amazing 600 pixel TV picture. With the 8833 MkII, Harwoods give you the complete set up, to get you going straight away... Monitor, RGB picture and Stereo Audio Cables, Tailored dust cover, and a full 12 Months on site service warranty.
☆RGB/AD, TTL, Composite. Video & stereo audio inputs ☆Can be used as a TV with VCR or Tuner ☆Also as a Video Camera display monitor ☆Retractable stand ☆Twin Stereo Speakers ☆Headphone Jack Socket ☆FREElead for your computer ☆FREE 12 Month on site service warranty.

THE MOST VERSATILE STEREO COLOUR MONITOR AVAILABLE **£219.95**

CBM 1084S STEREO COLOUR MONITOR.
Commodore's Own Stereo High Resolution Colour Monitor with... ☆RGB/AI/TTL, Composite. Video/Audio Inputs ☆Can be used as TV with VCR or tuner. ☆Twin Speakers for stereo output ☆Supplied with cables for A500, CGA PC,\C16-64-128. **£249.95**

It's important to remember that most TV Monitors, are still first and foremost televisions, meaning that their average 400 pixel tube display 50% lower resolution than a monitor) cannot be guaranteed to display 80 column text clearly without risking eye strain. If choosing a Television Monitor ensure it has the latest 2000 character tube capability, meaning it can handle the Amigas' 80 characters, by 25 line output clearly.

NEW!!! PHILIPS 15" FASTEXT TELETEXT REMOTE CONTROL 60 CHANNEL MONITOR TV. BRAND NEW SUPERB DEFINITION PHILIPS MONITOR TV. IDEAL FOR AMIGA OR CDTV USERS, GIVING FOR THE FIRST TIME TRUE MONITOR QUALITY FROM A FULL FEATURE TELETEXT TV AT AN AFFORDABLE PRICE!!!. JUST LOOK AT THE FEATURES... ☆Direct Scart Connector for Amiga, CDTV, VCR OR SATELLITE RECEIVER ☆RGB/AD, Composite Video & audio inputs ☆FULL TELETEXT FACILITIES (FOR THIS FACILITY EXTERNAL AERIAL SHOULD BE USED) ☆Headphone Jack Socket ☆FULL TWO YEAR GUARANTEE ☆2000 CHARACTER HIGH DEFINITION FST TUBE ☆SUPPLIED WITH LOOP AERIAL ☆REMOTE CONTROL ☆FREE lead for YOUR computer *(IF YOU WOULD LIKE THE MONITOR TV IN OUR PACKS 2, 3, AND POWERPRO, AT JUST £20 EXTRA, TO REPLACE THE 8833/II, SIMPLY ADVISE US AT THE TIME OF ORDERING)* ONLY **£249.95**

OPTIONAL 10 GAMES JUST £10 WITH MONITOR (i.e. These games are already included within Harwoods Amiga Packs 2, 3 & Powerpro... see details on pages 1 & 2 of this advertisement!!!)

AMIGA ACCESSORIES

KCS POWERBOARD IBM PC EMULATOR ☆Allows you to run many popular IBM PC compatible software titles on your Amiga or Amiga A500 Plus ☆Hercules, CGA & Monochrome Video Support, ☆Supports Both 3.5 Inch & 5.25 Inch Diskettes ☆Fits Into A501 RAM Slot, 8088 XT Processor, ☆Clock/Calendar Included, ☆Acts As 512K RAM Exp. When In Amiga Mode, ☆Includes MS-DOS 4.01, Shell & GW-BASIC, DOS-Help, & On-Board Memory ☆Supports A590 Hard Drive, Mouse Driver Software Included. WHEN ORDERING PLEASE SPECIFY WHETHER YOUR AMIGA IS A 1.3 OR PLUS VERSION. — **£219.95**

KCS POWERBOARD AS ABOVE BUT WITHOUT: MS-Dos 4.01, GW-Basic, Shell, — **£189.95**

POWER MONO SCANNER COMPLETE WITH POWER SCAN SOFTWARE — **£99.95**
100dpi TO 400dpi. Supports up to 64 grey shades. Throughport for printer etc.
Supplied with Power Scan software, allows full screen image editing, interlace mode on or off, edit true grey scale and even colour images.

SUPRARAM RX 500 (2Mb. to 8Mb. RAM Expansion)
The RAM expansion giving massive memory WITHOUT dismantling your Amiga, thus avoiding the possibility of invalidating your warranty. Easily connects to sidecar with bus 'pass-through' for HD's etc.
2Mb. RAM Version £199.95 **4Mb. RAM Version** £329.95 **8Mb. RAM Version** £549.95



NAKSHA MICROSWITCHED MOUSE	£24.95
HIGH QUALITY OPTICAL MOUSE	£32.95
COMPETITION PRO JOYSTICK 5000 Black	£7.95
ZIPSTICK JOYSTICK	£11.95
COMPETITION PRO STAR JOYSTICK	£13.95
3.5" DISK HEAD CLEANER	£2.99

The ONLY joystick to obtain a 100% rating from a magazine review!

BLANK DISKS with labels
10 Genuine SONY 3.5" branded Only £8.95
50 Genuine SONY 3.5" branded Only £34.95
10 Unbranded with library case 3.5" certified Only £6.95
200 Unbranded 3.5" certified Only £79.95

MIRACLE PIANO TEACHING SYSTEM - Music Keyboard to connect to your Amiga — **£299.95**
Miracle is the first Piano to teach you how to play it. Whether you want help finding Middle C, or want to learn how to play Mozart, Miracles stunning Amiga Software and Midi Keyboard turns learning into FUN. Study Classical, Rock and even Jazz.

- ❒ 128 Built in Sounds ❒ Full sized Touch Sensitive keyboard keys ❒ Stereo Sound
- ❒ Get even more from your Amiga ❒ Miracle even gives you a recording studio
- ❒ Versions for other computers available too, please ask for details

POSSO STORAGE BOXES £19.95
150 piece stackable 3.5" disk storage boxes

BANX STORAGE BOXES £11.95
80 piece lockable 3.5" disk storage boxes

MANY MANY MORE ACCESSORIES TOO NUMEROUS TO LIST ARE ALWAYS AVAILABLE FROM GORDON HARWOODS. If it's not listed just phone us and ask!!!

Easy Ordering

Before you choose from whom to purchase, please phone us. We are always happy to discuss your requirements, and answer any queries you may have...

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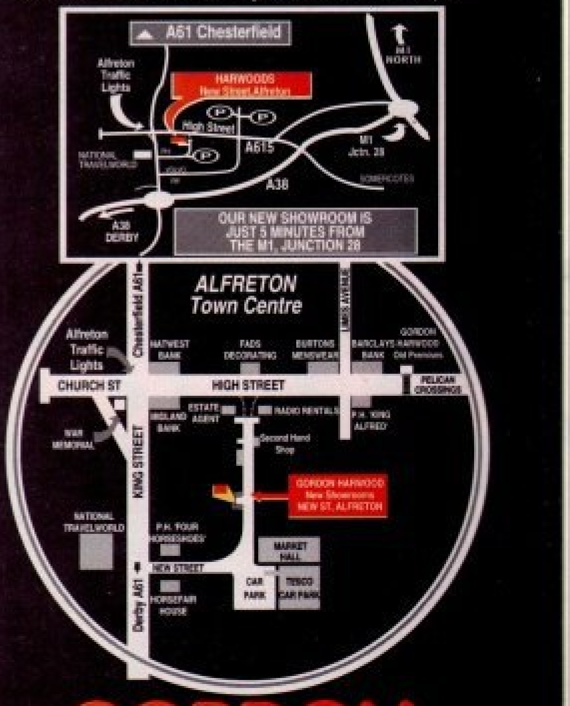
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Picturesque

Déjà Vu Software, by Paul Burkley

This disk is excellent value for money, containing a selection of programs designed mainly for the manipulation of graphics. It's good to see PD programmers using the extra space on their disks after the "main" program to give the user even better value for money, so make sure you do your bit and get your shareware fees in should you find any of the programs useful. Ooh, I went all self-righteous then.

Anyway, Picturesque is now at v2.5, and is an excellent Amos tool for the creation of graphics for games, demos and the like, as well as sprites of any size up to a full screen.

As Paul says, he's not trying to compete with the likes of DPaint, just attempting to make it easier for programmers (or just the interested) to design games and demos using Amos. Picturesque is polished and professional and worthy of the attention of anyone who's looking for a little help designing the next Elvira (ooo-er).

The disk also contains **Daisy Painter**, a basic but extremely well presented graphics program, shifting the emphasis firmly from dull professionalism to the realm of fun!

The icons used to control the action are clear and chunky, and they include a "fun" option which "mirrors" the screen from the centre, allowing the creation of all sorts of symmetrical patterns.

It's a bit like a kaleidoscope crossed with one of those drawings you do on a folded up piece of paper, which turns into a symmetrical pattern when you open the paper out. Either way, it's extremely good fun.

There are no text or print options, but you can save your creations out to disk as standard IFF files, or using the program's custom saving format – unfathomably called Spac Save – which shrinks the file to a much more manageable size. Indeed, the author claims that it is possible to save over 100 pictures on one floppy using this method.

The most notable feature about this program, though, is the paint mixing section. Instead of RGB sliders and saturation numbers, as is common elsewhere in the graphic package world, Daisy Painter has extremely user friendly tubes and pots of paint, which can be mixed simply by selecting and clicking on them. It's all very intuitive, and far less intimidating than more "professional" colour mixers.

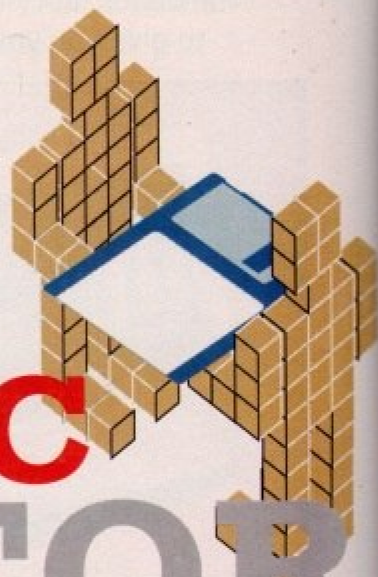


The exceedingly friendly and, as far as I know, unique paint mixing screen in Daisy Painter

Finally, the disk contains **Smiley Puzzle** – one of those four by four tile puzzles where you have to slide the individual tiles around in order to unravel a jumbled up picture.

In this version it's a smiley face (at least on the first puzzle – my staying power ain't what it used to be and I never reached the second) and you have a time limit in which to do you unravelling. It's nice to look at, if overly simple, and offers some light relief on a well recommended disk.

Phil Morse sifts through this month's PD and shareware programs and finds some prize gems



PUBLIC SECTOR

68000 Coders' Disk Mag

Thunderhead Software, licenceware

Now here's a disk from a dedicated bunch. Ever wondered where the average 68000 assembly language programmer hangs out for a chat about his registers? Not the local pub, that's for certain.

No, for your average code-crazy kid, there are precious few paces where all things codey can be discussed with fellow binary junkies.

However, magazines like this disk-based one go some way towards banishing the isolation. This issue of the mag talks you through creating copper bar

Dangerous Demos

● **Rave Vision** *17 Bit disk 2004 , by Intense* This is a novel techno demo disk. Novel techno? I hear you ask. Surely no disk containing sub-standard 8-bit samples of records of dubious musical origin can add anything to the tedium created by the last 1,500 such PD offerings? Well yes, actually.

Rave Vision shines in its user interface, which is an extremely well-drawn CD player and amplifier. You can control loudness, volume, track selection, fast forward and rewind, just like the real thing, and to top it all off there's a clever animation box at the top of the screen which contains, among other (selectable) animations, a great one of a silhouetted dancer. The music's average, but it's worth a look for the ingenuity of its presentation.



Yo! Sweet one, rockin, non-stopin', getting it sorted, laters... etc etc

● **Half Brain Mega Demo** *17 Bit disks 2036A/B* Cripes! A demo that lives up to its cocky and self-indulgent scrolly texty bits! Such examples really are few and far between.

This actually does new and interesting things with vectors – no mean feat – and after showing off what it can do with the cube-like little blighters (or should that be blitters? Probably not) it lets you have a go, using the joystick as control.

Yes, it does make dubious references to, and indeed allows you to "stroke", a grid-like digitised (and hence highly unrealistic) pair of breasts while telling you to "feel the power".

It also contains a nauseating quiz at the end which contains the question "Are we [the programmers] cool? Choose from A: Yes, B:Yes, C:Yes", but then again I can't remember when I last stayed awake until the end of a demo, so I'll forgive them... just this once, mind.

● **Frac-tales** *Strictly PD disk D480, by Shadow* Urgh! Isn't it the most irrationally annoying thing when something you don't understand seems to appear all the time, everywhere you look?

There must be many folk who feel this way about fractals. I mean, fractals! What are they? Where did they come from? Why wasn't I saved the embarrassment of my ignorance by a bit of timely teaching at school? Erm, because fractals were only discovered 12 years ago by eminent fractal scientist Mandelbrot, and are uniquely a product of the computer age.



Chaos aplenty in this instructive demo/frac-torial

This is because they are reliant for there very existence upon the ability of who or whatever is creating them to do countless calculations very quickly.

This program is basically a demo, and the strange evolving images really keep you glued to the screen, while the scroll-past text assuages your ignorance, replacing it with New Age enlightenment and an understanding of Chaos Theory – or something like that.

It's all well and good until the obligatory back-patting credits start to appear, and is recommended for anyone who feels left behind by the weird and wonderful world of our random pals.



Amos Cricket – the most realistic cricket simulation ever on the Amiga?

Calling all PD libraries

Got anything worth reviewing? No, I don't mean another bouncing vector demo, but anything original, useful, or just good ol' bizarre?

If you have, get it sent to me! I can't guarantee inclusion, and I certainly can't return your disks, but why live in numbing normality when you could be light-footing along the razor's edge?

Go on, get those Jiffy bags stuffed! Just remember to include a description of what you're sending and – wherever possible – printed documentation.

effects which are only accessible through machine code programming, and includes example games, which are there as examples rather than to be played – unless you have a particular penchant for Bat and Ball, circa 1981, that is.

So if you've been having the odd cursory glance at Margaret Stanger's Programming column and thought "I'd like a go at that", give this disk a look!

Dog/Nova

17 Bit disk 2009, by David Cole

From the Fish Disk catalogue, this is yer typical PD puzzle effort. This time you have to shove rubies around a grid in order to eventually line them up at one end of it. You do this with a, erm, ruby pusher, and the idea is to complete each screen in the smallest number of moves possible.

It's challenging, but not particularly involving and very derivative. Nova has you doing basically the same except it's "blue ice" you're moving around. All right for passing the odd five minutes.

Amos Cricket

17 Bit disk 2022, by P Robson

Occasionally the PD world throws up a game which has been written by a real enthusiast motivated by – gasp! – the wish to write the perfect whatever, rather than the will to make oodles of cash out of naïve 12-year-olds.

It came as no surprise to P Robson, the author of this simulation, that commercial cricket software seemed to be doing just that, so he set out to write the ultimate cricket sim.

This is really involved and realistic stuff – the scoring table bears a pleasing resemblance to that which the BBC use, you have a host of real players to choose from, and you can even tweak their characteristics.

Skill, aggressiveness, pace, even leg movement and bowler type – all areunder your control for every individual member of both your and your opponent's team, which can be either another player or the computer.

You are able to choose which type of match you will play, from gruelling tests to over-limited one dayers, so choosing how long you'll be sat in front of your screen – great for slipping in a quick play after coming home from work and before (tea/*Coronation Street*/the pub delete as applicable).

The actual simulation is instantly recognisable as an Amos product, which is certainly not a bad thing, and the game is thoroughly engrossing for all cricket fans. Well recommended.

ABCD – The A to Z of C64 Tunes

17 Bit disks 2024A-D

Let's face it, the public sector isn't about to throw up the new Lemmings or Monkey Island. What it does do, it frequently does well, however, and that is release disks which are of minority interest, or just plain bizarre.

As its name suggests, ABCD – The A to Z of Commodore 64 Tunes, is just that – four disks crammed with dozens of absolutely terrible bleepy nonsense, courtesy of Håkan Sundell and Ron Birk.

They're all here, from Arkanoid to the Hobbit, and they all sound absolutely terrible too! Just like the originals! Wonderful.

Nebula

Anglia PD DISK G6026

All the way from Queensland, Australia, this is a typical stripped-down 3D shoot-'em-up, in the style of Star Wars of old and Epic of new.

All the usual features are there – a cockpit containing your controls – in this case, the obligatory radar for detecting where the enemy is – and the all-important laser gun. You basically move around seeking out ships and destroy them. It's all very Battlecars in space, and pretty engrossing, if only for a short while.

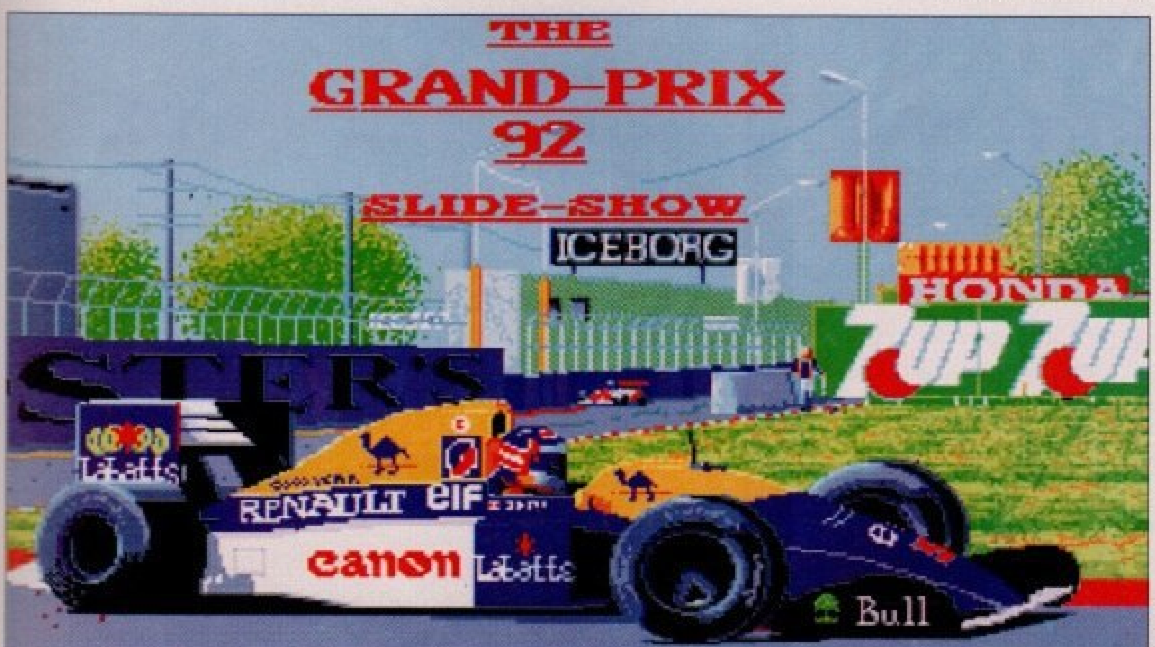
However, this program stands out thanks to its highly inappropriate in-game music, for which immediate purchase is advised.

Word Power

17 Bit disk 2023, by Steve Rennocks

This is another of those wonderfully strange and strangely wonderful programs which only the PD world seems to throw up. A lexicographer's dream, Word Power is based around its own dictionary, and is basically concerned with the manipulation of words in any of a number of ways.

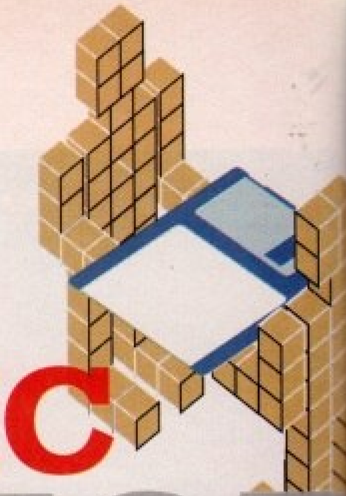
You can spell-check files by simply telling it where to located the file you wish to check, you can teach the program to recognise sentences, there's a crossword solve feature, which allows you to fill in the letters you know and then tries to find a word or words that ➤



The image quality on Grand Prix is exceedingly high



PUBLIC SECTOR



What's going on in the PD world?

Do you have any news about anything relating to the world of PD? Maybe Prince Charles has opened his own PD library or your library has just topped one million individual titles. If so , drop me a line

➤

match, and it also gives you numerous statistics fascinating to anyone with a remote interest in the written word.

The dictionary is only 2,500 words long, making this more of a curiosity than a useful tool, but if you jump up and down at finding out that the average length of the words in the dictionary is 7.4 letters, then this program is for you!

Grand Prix Slide Show 92

17 Bit disk 2029, by Jake of East London (!)

I've got time for anything credited to someone like "Jake of East London", and this slide show rewarded my patience.

There's only a certain level of involvement one can expect from a slide show, but the combination of some particularly juicy photos of the Grand Prix – all in full colour – and some inspired and funny music which seems to draw equally on the musical legacies of the Art of Noise and, er, a car revving, make this disk a worthwhile purchase.

The music is better than many a techno disk, and the pictures are interesting as well as of high quality.

Where to get'em

Anglia PD, 115 Ranelagh Road, Felixtowe IP11 7HV

Déjà Vu Software, 25 Park Road, Wigan, Lancs

17 Bit, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH

Strictly PD, 11 York Place, Brandon Hill, Bristol BS1 5UT

Thunderhead, 8 Swanage Road, Small Heath, Birmingham B10 9ES

Golden Oldies Games Compilation

17 Bit disk 2031

Now I've been dreaming of a disk like this for sometime. "Why," I've been thinking, "has nobody collected a bunch of classic arcade games onto one PD disk?"

Hurrah! Someone has, and jolly decent most of them are too. Croak is, unsurprisingly, a Frogger clone, and it's all there – the road and the river contain the usual mix of deadly (and friendly) horizontal scrollers.

Cars, lorries, logs, turtles, spiders, flies, ducks – all are good and present and ready to help or hinder your little frog in his quest to get back to his suspiciously symmetrical resting place on the bank of the river.

Particularly compelling are the almost luminous red splats on the road when you get run over, which remain there throughout the game, to remind future would-be flippant frogs of the ephemerallity of their existence. It's a classic game, acceptably re-programmed here.

Mouth Man is a Pac Man clone, faithful to the original in just about every way, including the ghostly eyes which glide around the tunnels when you eat one of our translucent chums, and the wonderful sound effects, which together with the graphics evoke the original extremely well.

Bi-Planes is an everyone's-played-it-for-ten-seconds-at-some-time game, where you have two planes, a hut and lots of sky.

The idea, using the unfeasibly fiddly control system, is to shoot down your opponent before he shoots you, but you'll probably pass over it for Drip!

Now I must admit that Drip! doesn't ring any bells from my arcade past, but it's pretty good nonetheless. The unlikely scenario is that (read this carefully) someone has piped your "party juice" and you must "rust" a grid of pipes to "let your juice flow again". Hmmm. What this all translates to is legging it around a grid until



Go and play on a motorway, dear...

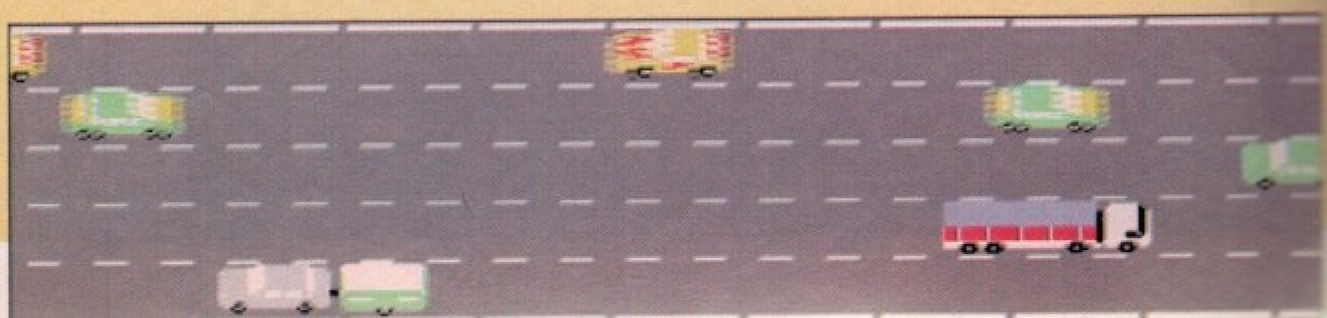
it's all changed colour, avoiding the baddies. It's much like Pac Man, except the baddies aren't tied to the pipes which you have to move around, giving them a freedom of movement which you have to match with your human acumen and intuition. It's all rivetting stuff... for about ten minutes.

Squamble is a version of defender with big, chunky graphics and many of the features of the original. It's good fun – I'm a sucker for shoot-'em-ups, especially ones which are quite easy, such as this – and still has the outrageous addictive quality of the original, even though overall it's not particularly faithful to its ancestor.

It's a lot better than Trailblazer, a copy of the arcade original of the same name, where you guide a ball along a scrolling track. Looking back, this is the grandfather of the racing game, and with a pedigree like that, I suppose it's only to be expected that it'll become tedious quite quickly.

All in all this is a brilliant disk, full of continuously rewarding flashbacks and brimming with the same addictive strains which characterised the originals.

Maybe one's critical faculties are suspended when faced with so much nostalgia, but I'd rather spend a couple of quid having my critical faculties suspended than having my brain numbed – how about you?



the DISK



Bumping into batteries sounds easy until you try Keith Bugeja and Colin Vella's fiendish puzzle game

This month's game, Revolution!, is an addictive and maddening puzzler shown in glorious full colour isometric 3D. The aim of the game is simply to bump into three or four batteries, thus collecting them, then exit the level.

Problem is, this walk-in-the-park exercise has been rigged to make it a stiff challenge to both reactions and brain power, making even the first level a bit of an uphill struggle to begin with.

The player controls a bouncing ball which can be made to move in four directions using the joystick, but even this isn't as simple as it looks due to the often confusing nature of the isometric universe through which the player moves.

Directions are out of skew because the playing surface has been rotated until there isn't really an up or down, or left and right, so figuring out which joystick direction corresponds to which game direction can be a frustrating business.

Assuming the controls have been mastered, the really tricky bit now crops up in the form of the puzzle in each of the game's 14 levels.

Your ball will appear bouncing over one square in a grid of squares, and must be moved around until all batteries on the current level are collected.

To collect a battery, the player must bump into it, but this will only work if one of the energy cells is discharging. To make it do this, bump into one – they're the black cubes scattered around the place – and it will fill with green light. As long as you hit a battery before the green light seeps away, it will disappear into your collection.

However, the problems don't end there. To exit a level, the player must bump into first one energy cell then a second before the first has finished discharging.

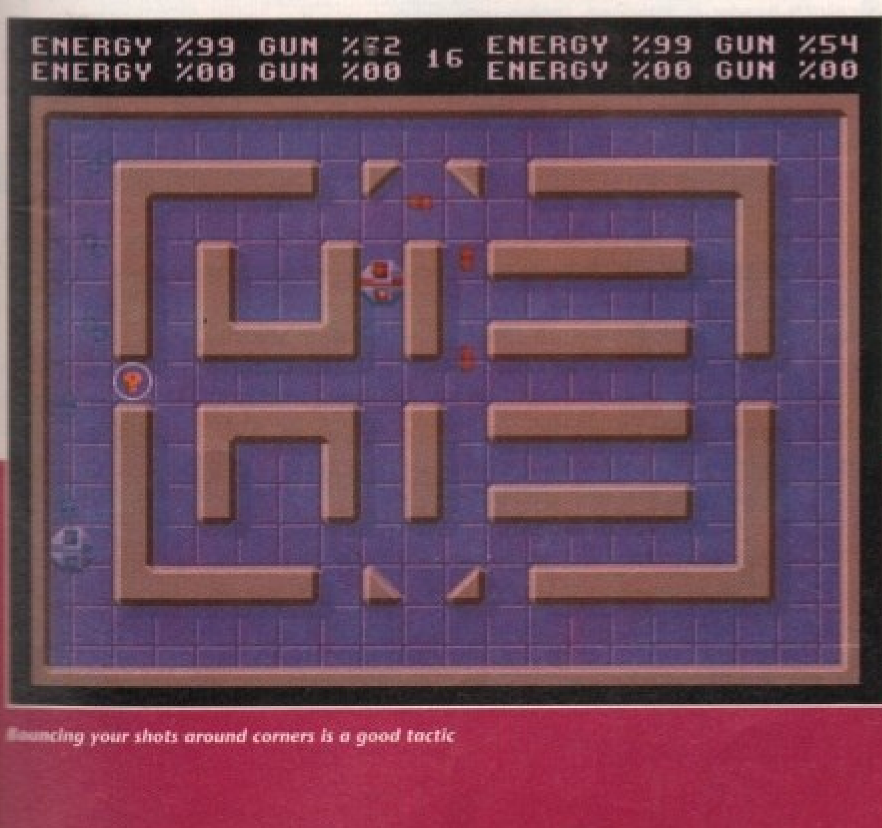
This is not as easy as it sounds, because on some levels the cells are so placed as to make exiting possible only with precise control of the ball. Waste any time and it's goodnight Jemima. Added to this there are the TV aerials which drain your power, the one-way squares which can lead you all over the place and waste time, and the other obstacles around which you must bounce.

The most important factor in all this is time, and you soon run out even with a decent game plan. In fact, if you can get to level 14 you'll be doing better than the *AC* team by about 11 levels. Good luck!

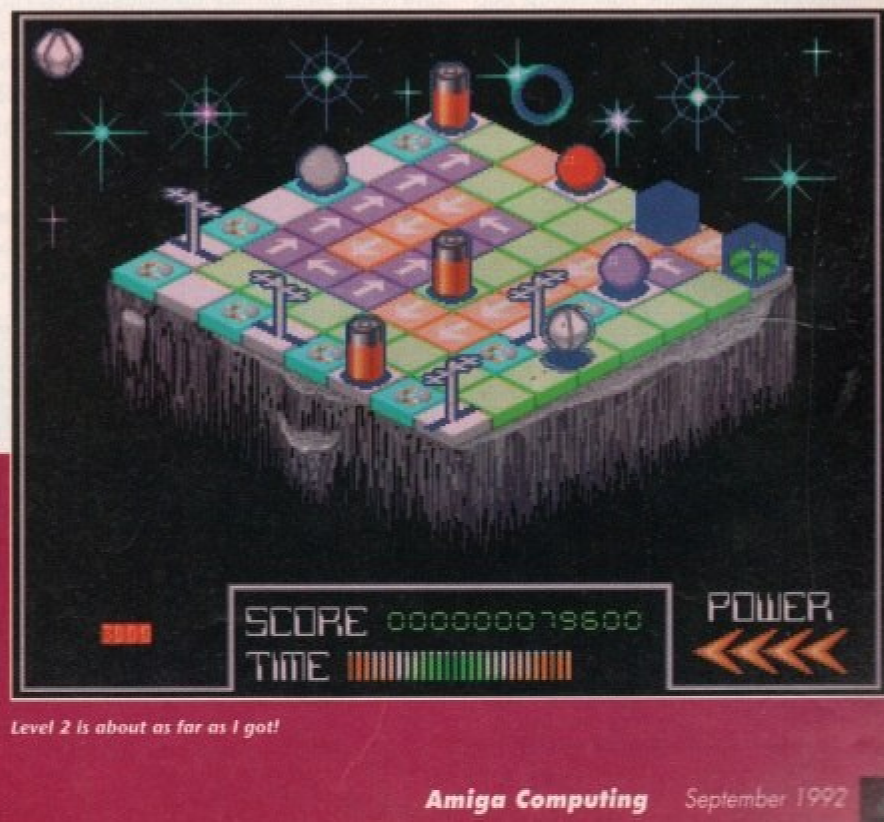


Even on the first level, Revolution can be very tricky

Revolution!



Bouncing your shots around corners is a good tactic



Level 2 is about as far as I got!



Video Manager

Author: Kevin Reynolds

Video Manager is a small database program dedicated to the organising and cataloguing of your video collections, and has several unique features to make it as effective as possible at the job.

The VM screen opens with a number of empty boxes used to hold video information, and a panel of VCR controls. The latter are used for entering and searching through your data, but for the moment there won't be any, so press the Play button to load the data from disk.

Now let's have a browse through the seven or so videos for which we have records. Pressing the Fast Forward and Rewind buttons will skip forward and backward one video at a time, the plus and minus signs add or delete a tape from the collection, and the Record button saves your data to disk.

So far so easy, but what if you need to find a video with just enough spare room to tape the end of the match? Normally you'd spend ages messing about with a huge array of badly labelled tapes until you either gave up or the match ended before you'd found one. With VM all this is history.

Simply hold down the right mouse button and select Find Space from the Video menu. A requester will pop up asking you to specify in hours and minutes how much time you need on a tape, and the direction you'd like to search in.

After this, it's a matter of a second or so before you know which tape you can fit the program on and what number to look for on the shelves. Oh – and remember to keep a note of videotape numbers, or VM is about as much use as a chocolate teaspoon.

For those of you with long play VCRs, VM will keep a note of whether a program was taped in long play or standard mode using the arrow button directly to the right of the program title in the tape list.

By clicking on this button you should be able to see the length of the arrow toggle between long (for long play) and short (for standard mode).

A note of caution – remember to tell VM the actual running time of a program when you set up a new video record. The program will automatically work out the tape time for programs recorded in long play mode, so you'll only confuse it if you start to work the values out for yourself.

Video Manager should enable you to keep a record of what's on tape, and where, and help you effectively use the space left over on all those videotapes.

It can only do this if you're prepared to apply a little organisation of your own – every tape will have to be numbered and a record kept of what's on it – but then we're all very tidy VCR owners already, aren't we?



Video Manager's VCR controls

LhA v1.32

Author: Stefan Boberg

LhA has for over a year been the leading archiving utility on the Amiga scene by virtue of its speed and mind-boggling array of options.

Its success has been such that the older .ZOO, .ARC, and .ZIP files are hardly ever in evidence on bulletin boards or PD libraries.

This latest version of LhA is an official release – unlike some badly bugged copycat programs – of the evaluation package, so shareware donors can look forward to even more powerful features. See the on-disk documentation for shareware registration details.

There may well be many of you who've never used an archiver before, so here's a quick explanation of what they do. Unlike PowerPacker, which is a runtime cruncher/decruncher, archivers normally work in such a way that they compress the selected files into a much smaller space but don't run them afterwards.

In other words, an archiver is used to crunch an entire directory or two into a single archive file which must be extracted again before the programs contained in it will run.

The upside of using an archiver is that impressive compression ratios of 75 per cent and above can be achieved, which makes programs such as LhA ideal for use in comms where large amounts of data are sent whizzing down the phone lines every day. Smaller files mean shorter transfer times, which mean smaller bills.

Run time packers will crunch a single program file, add a decrunch header to the file, then save the lot to disk. When the crunched file is clicked on, the decrunch header is activated, makes use of the packer's library file, and decrunches the file in memory before running it.

This is very handy, but useless for large lists of files which have to be sent down the phone lines, hence the invention of complex archivers.

Using LhA can be either a mildly complicated operation or a nightmare of almost 68000 assembler coding proportions. There simply isn't enough space here to cover the most complex ways of using the program, so we'll just look at adding and extracting files from an archive and leave you to read the superb program documentation for the rest.

To create a new archive, you must use the "a" (add) option and tell LhA what the new archive is called and where it is to be found. For example, you might type:

```
LHA A RAM:AC {filename and path}
```

and LhA will create an archive called AC.LHA in the RAM: disk containing your specified file.

If you wanted to archive all the files in a directory, the easiest way would be to change directory such that the desired drawer was the current drawer, then type:

```
LHA A RAM:AC
```

As you failed to specify a file or file pattern, LhA will just archive all files in the directory, which is a quick and easy way of going about things.

Extracting files, which is what most archivers spend most of their time doing, is simplicity itself. The only prerequisite is that the archive to be extracted is in a drawer or on a disk with enough space to hold the extracted files.

Probably the best answer is to copy the archive to a blank floppy or into RAM if you have 1Mb or more, then type:

```
LHA E {archive name} {destination pathname}
```

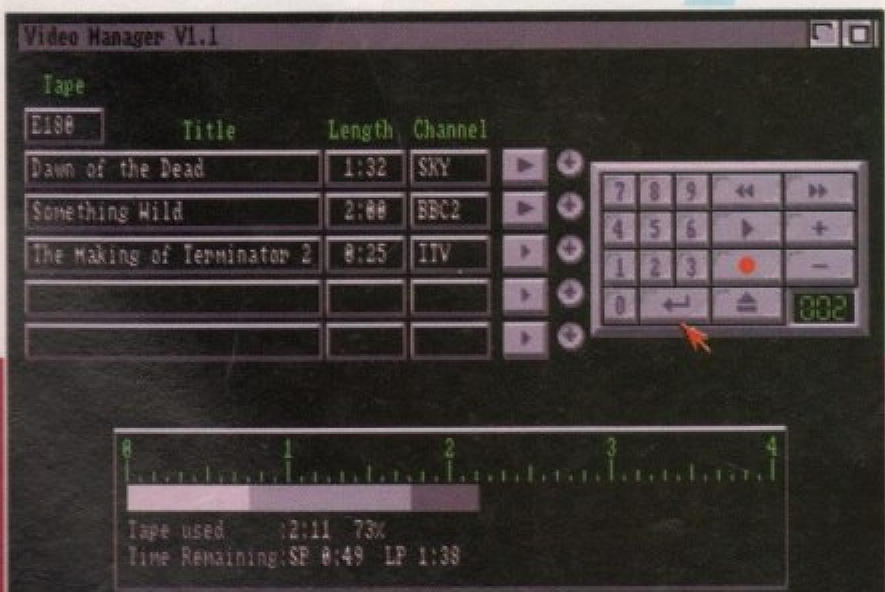
The optional destination pathname is used when the archive is in a full directory and you want to redirect extracted files somewhere else. For example, to extract our file AC.LHA and send the files to a floppy disk called UNARC:, we would type:

```
LHA E AC.LHA UNARC:
```

This command should result in the extracted files from AC.LHA being copied to the blank floppy from where we can access them at a later time.

The above introduction is hardly even the tip of the LhA iceberg, though in describing the basic extracting and compressing commands we've covered the most important areas.

To make fullest use of this utility, especially all you comms fans out there, see the lengthy but comprehensive documentation on the CoverDisk.



With VideoManager, finding that elusive half hour space is made easy



DocDump

Author: Robert Grob

DocDump is a unique printing utility designed to take existing text files and send them to your Epson-compatible printer as documents, complete with page numbers, superscript text, headings, and a title page.

It will work with all the common printer models, including the Sharp, Citizen, Swift, and Panasonic ranges, so it should offer something for most people.

To use DocDump (DD), just double click on its icon and the DocDump screen will open over your Workbench. You should now be confronted with a range of selection gadgets and text strings used for the settings which will govern the finished document's appearance.

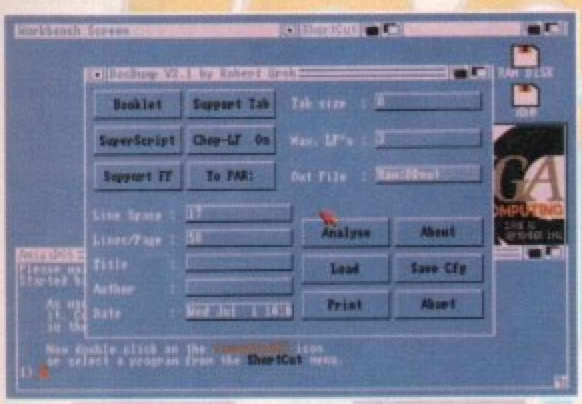
All documents created with DD are printed in half size print, either superscript or subscript, so it is possible to print entire mini-booklets.

The program will ensure that the pages are printed in the correct places on a page (four can be fitted on one side of A4), and will then print the reverse when you turn the paper over.

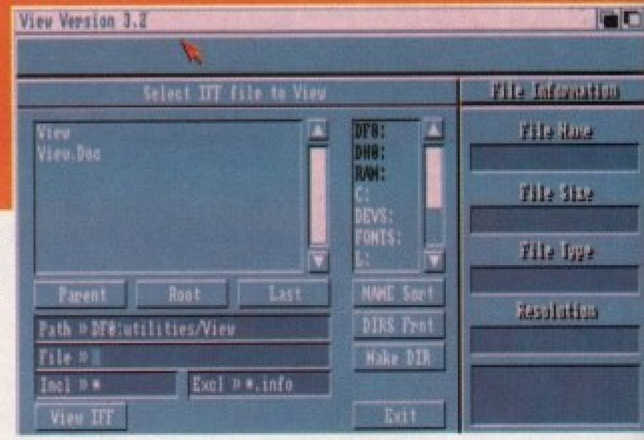
This can be a bit tricky, but once mastered is an ideal way of producing a booklet out of a long document, especially some of the tediously long docs accompanying some shareware and PD programs.

If you think the booklet idea a bit too much hassle, you need only select the Dump option, and DD will print four pages of your document on one page of A4.

Experimenting with this program could save you a lot of messing about with other print programs, not to mention the savings in eye damage. Have you ever read something off a computer screen for half an hour or more?



DocDump is deceptively simple, yet can produce stunning results



View has an easy to use interface

View v3.2

Author: Michael Hartman

Animation players are the sort of humdrum utilities you never give a second thought until you decide to actually produce and run your own animation, at which time you suddenly realise just how duff and inadequate many of the available players can be.

This situation arose recently in the *Amiga Computing* office, so we set out to find you (and us) the best and most friendly anim player around. There were a couple of candidates, but View v3.2 won the contest by virtue of its easy interface and range of sensible features.

In particular, we were looking for a player which could be used when recording Amiga animations on videotape, and that's where this program comes into its own.

View can be run either from its icon or from Shell, and can also be specified as the default tool type for an animation's project icon, so it will work no matter how you want to kick it up. When running, however, the program begins to show its class.

Speed can be controlled from 1 to 60 frames per second (fps) thus allowing full speed interlaced anims, and the anim can be paused, advanced a frame at a time, or set to run at a default speed.

All of these controls can be applied as the animation is running, so for those recording their work to VCR, View offers the ideal environment.

There are no messy gadgets or menus involved in View's interface, and all controls are allocated to either a function key (for the various speeds), the space bar (pause), or some other keypress. This enables control of an animation from the background, thus keeping the screen clear for the anim.

View will accept all ANIM 5 format files, and will view standard IFFs or Sculpt RGB format files.

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CoverDisk Awards 1992

Amiga Computing's CoverDisk has seen a lot of high quality reader submissions over the past year, many of which have graced the disk boxes of users throughout Britain, and in recognition of the indispensable service of all those hard-working coders out there, we've decided to run a readers' awards competition. For now, all you have to do is fill in the form below to nominate your favourite three progs in the categories shown.

Send the form back to me at the CoverDisk Submissions department and we'll print the final voting form in the next couple of months. The vote will double up as a competition, with the winning authors receiving glittering prizes. As an added bonus, all those who voted for the winning entries will go into a prize draw for a spectacular prize.

Look out for further details of this when the voting form is printed.

Category 1: Game-of-the-Year

Nomination 1:

Nomination 2:

Nomination 3:

Category 2: Utility-of-the-Year

Nomination 1:

Nomination 2:

Nomination 3:

Category 3: Tune-of-the-Year

Nomination 1:

Nomination 2:

Nomination 3:

Please feel free to enclose a note with your nominations setting out how you think the CoverDisk has succeeded or failed in the last year and how you think it could be improved.

Sensible suggestions will be put into practice if enough people think them necessary, and outlandish ideas will be binned on sight, so if you want to change what is, after all, *your* CoverDisk, drop us a line.

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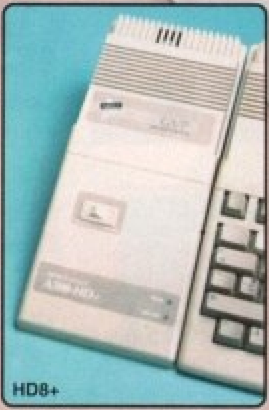
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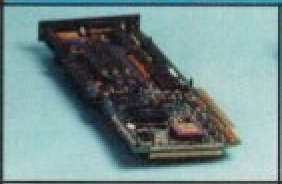


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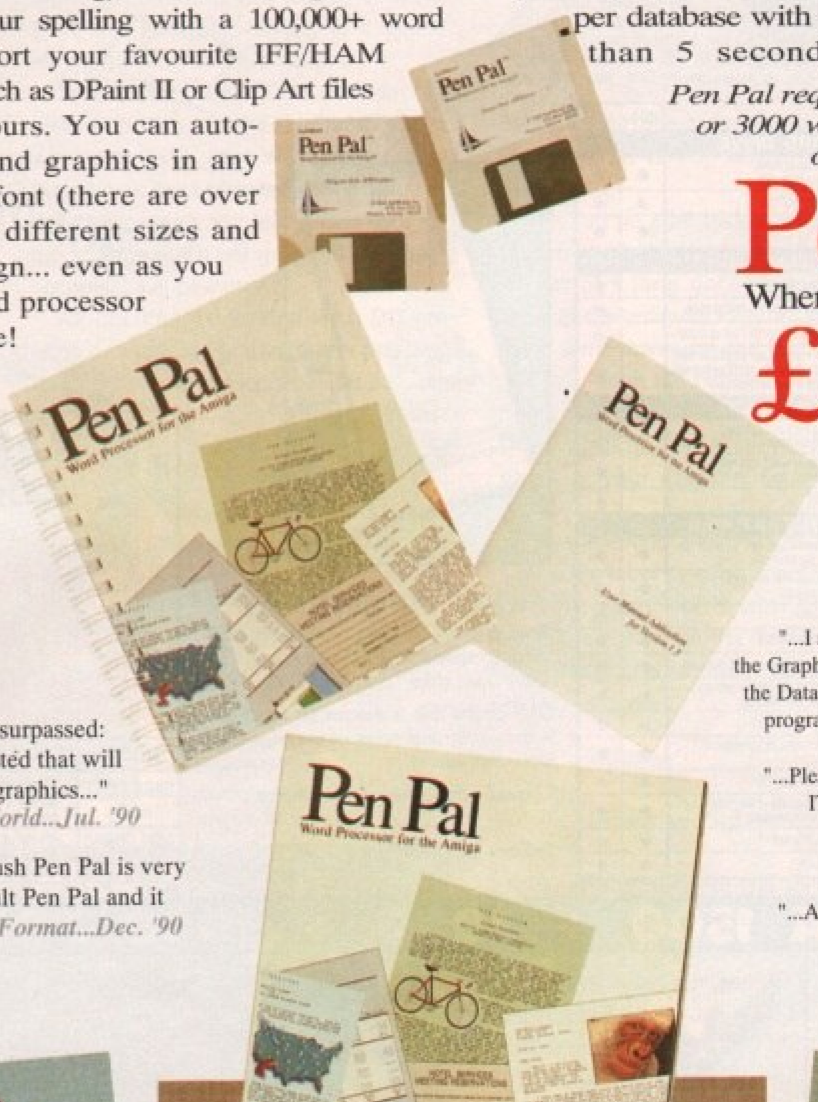
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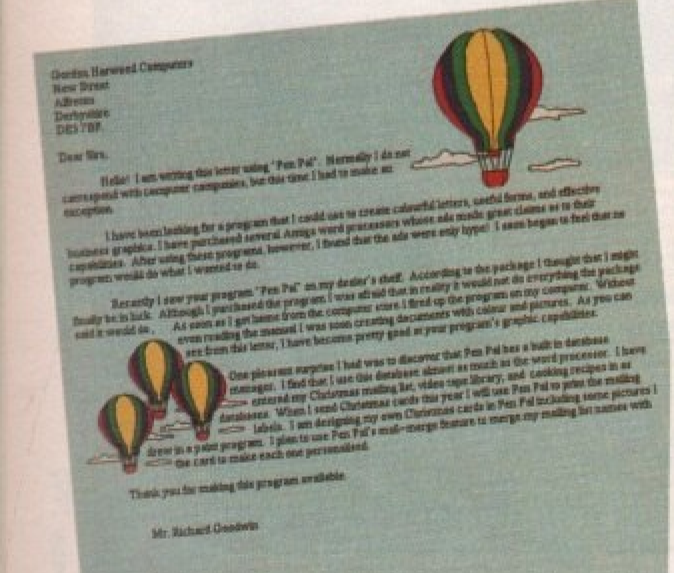
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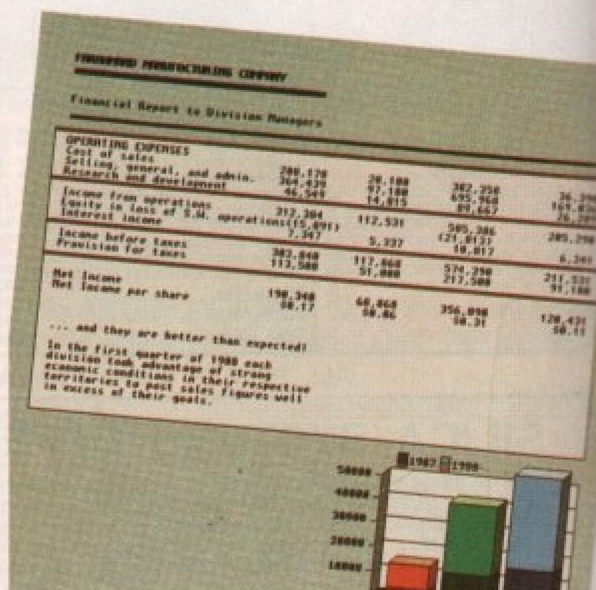
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ABSOLUTE beginners

PART 6

Stevie Kennedy looks at the Shell-startup and ways to make life easier

When the average user begins to use Shell and AmigaDOS, it is usually the case that a quick double click without thinking more about the working environment is the simple route to opening a command window.

However, before the Shell window pops up on screen there's a great deal of behind the scenes malarkey which can be put to use in the cause of user friendliness.

Earlier in the series, when setting up the Shell handler on our disk, we created a file in the S: directory called "shell-startup". This file is accessed by Shell every time a new process window is opened.

Shell-startup will normally execute the Prompt command and a few very useful Alias commands. Alias is much neglected by users, partly because it is best used in an area many people don't go near, so I'm going to concentrate this month on how best to employ its peculiar talents.

An alias is applied when there is a long and often used command you'd rather not type out in full, but can also be treated as a convenient keyboard short-cut. In syntax terms, the Alias command goes something like:

```
ALIAS {your shortcut} {DOS COMMAND}
```

so to make closing a Shell window as quick as possible, you'd use the command:

```
ALIAS Q ENDCLI
```

Add this line to your shell-startup file and closing a Shell window will be a much faster job in future.

If you sit and think about it, there are numerous occasions when this sort of short-cut would be a real blessing. I mean, how many times have you typed:

```
DISKCOPY FROM DF0: TO DF1:
```

To cut out the typing, you can simply add the following alias to your shell-startup:

```
ALIAS D01 "DISKCOPY FROM DF0: TO DF1:"
```

Notice the quotation marks? These enable the use of complex command strings when setting up aliases such that just about any single line AmigaDOS operation can be reduced to a couple of keystrokes.

Astute users might already be thinking of the limitations of the Alias command, especially where an AmigaDOS command expects some sort of parameter to be passed before it will work.

However, Alias has an answer to these doubts through the use of square brackets which tell the alias when to expect the parameter.

For example, one of my favourites, which saves a great deal of messing about when de-archiving files crunched using the Lharc or LhA archivers, is:

```
ALIAS EX "LHA E,X [ ] RAM:"
```

The square brackets are simply substituted where the command LHA would normally expect the name of an archive to be, so when used, the alias might look something like:

```
EX MY_ARCHIVE
```

rather than the finger-popping:

```
LHA E,X MY_ARCHIVE RAM:
```

You get the picture. It takes only a moment's consideration to think up a long list of possible time-savers, included among which might be:

```
ALIAS EDS "ED S:STARTUP-SEQUENCE"
ALIAS FQ "FORMAT DRIVE DF0: NAME [ ]
    NOICONS QUICK"
ALIAS COMP "LHA A RAM:MY_ARCHIVE [ ]"
```

and so on, ad infinitum.

The use of Aliases doesn't necessary stop at shortening lengthy commands, however. If you make extensive use of Shell and don't like having to go to Workbench to click on icons for particular programs, it is possible to set up a couple of aliases for your most used applications. For instance:

```
ALIASPP"RUN>NIL:<NIL:SYS:UTILITIES/POWERPACKER"
```

reduces the command to run PowerPacker to three keystrokes.

For those who have recently joined the series, or – perish the thought – those of you who might have given up on editing things, you can edit your shell-startup file by booting from a Workbench disk, opening Shell, and typing:

```
ED S:SHELL-STARTUP
```

It is then a simple matter of inserting as many aliases as you require.

Each must be on a line of its own and, for the sake of neatness, should be inserted just before the Prompt command found at the end of the file. Shell-startup is a also a useful place to set up Assigns which you only use when accessing Shell.

For example, you may already have a Wordprocessor disk with the assign TEXT: set up in the startup-sequence, but when carrying out a predominantly Shell-orientated job such as C programming or de-archiving files, the shell-startup is a good place to start.

The reason for this is that when booting from a floppy, a long list of Assign commands in your startup-sequence will slow down the booting sequence quite a bit, which is uneconomical if you are going to use only a couple of the assigns in day-to-day work.

To keep all those commands in the place best suited to them, and shorten your booting time, take such assigns as:

```
ASSIGNINCLUDES:SYS:UTILITIES/LATTICE_C/INCLUDES
```

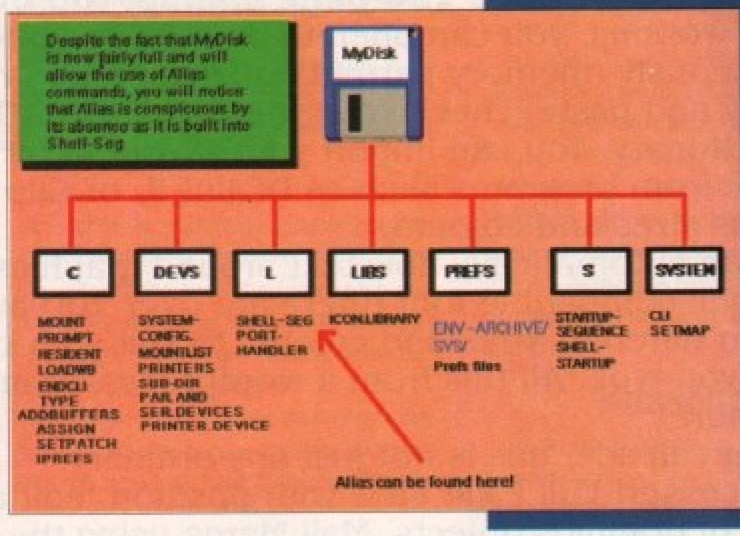
out of the startup-sequence and stick them in shell-startup.

Can't remember what an Assign command does? It is simply a way of telling the Amiga that for some very long directory path names, you'd rather type a simple device name – the ones with the colons at the end.

An assign command enables the user to choose a device name and allocate it to a directory which would otherwise be a pain to type every time you wanted to access that directory.

For example, all copy generated on my machine for the magazine is saved in a directory whose full path name is DH0:Wordworth/Text, but it can be accessed as just plain old TEXT:.

Next month we'll finally take a look at the prefs directory and some of the ways in which it can be used to make your Workbench disk work better for you. AC



Can you spot the Alias command?

This month's commands

Alias

This can be typed in at any Shell window, but is best used in the shell-startup-sequence. It has the syntax:

```
ALIAS {Keyboard shortcut} {AmigaDOS command}
```

and is used to make life easy when typing commands in Shell.

The alias command is an integral part of the Shell handler, so there's no need to copy it from one disk to another. So long as a disk is set up to open a Shell (as opposed to the old-fashioned CLI), users can alias to their heart's content.

If you really insist on copying the Alias command to a new disk, try to find it first! A fiver to the person who does...

This month's jargon

Keyboard short-cut

This can mean many things, but is basically any quick keypress or combination of keypresses which makes a long-winded operation a little faster.

Most users will never bother to learn the keyboard short-cuts for, say, their favourite wordprocessor, as every function is usually accessible from drop down menus or icons.

Do it this way if you like, but if you like life quick and easy the keyboard short-cut is always a useful little beast.

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THE QUESTIONS

1. What will store large amounts of data?

(a) Watering can
(b) Hard drive
(c) Boot

2. If you don't have a monitor you need one of these:

(a) Bus pass
(b) TV
(c) Potato peeler

The word game *part 2*

Stevie Kennedy finds out just how affordable high-end Amiga publishing can be

When most Amiga DTP enthusiasts turn their thoughts to the world of magazine publishing, their minds are almost always filled with images of large profitable companies wielding commercial clout and enough cash flow to drown Scrooge McDuck. The result is that one of the potentially most profitable areas of Amiga use is hurriedly abandoned.

Printing at this level is a complex business, because unlike our camera-ready printed output of last month, the magazine we'll construct this month will need full PostScript output and the aid of a vast array of printing technology. It all, however, starts with the Amiga, and for this job you'll need a bit of a whopper.

An Amiga 1500 with 68030 accelerator, 4Mb 32-bit RAM, and an 80Mb hard drive is the minimum requirement, though a much bigger hard drive, more RAM, or perhaps an optical drive would be better.

It all sounds very expensive, especially when you add the cost of PageStream, ProPage, or Saxon Publisher, but I guarantee you won't find commercial publishing a reality on any other system at the same price.

Next you'll probably need a fast modem. Due to the size of the PostScript files you'll be sending to the printers, floppies are useless, and the files (often in excess of 2Mb for each colour separation – 8Mb a page) will have to be sent down the phone wires so that they can be printed to film using a linotron.

Separation

The process can be made a lot less painful if you stick with spot colour and use mechanical separation (see last month's discussion of this technique) because file sizes are then very much smaller and many will fit on a floppy disk.

However, if you go full colour, an HST modem or removable optical/hard drive is the only choice.

Starting at the beginning, the potential publisher designs and plans, say, a local listings magazine. Our magazine will be a free paper, so advertising will have to pay at least for the printing and distribution. This necessitates the use of cheap paper, mono or at best spot colour printing, and little in the way of extras.

The cover (a four-page section, when you think about it) will be the only glossy colour part of the mag. To skimp on this would be suicide as the cover design will often determine whether a magazine is opened, or used to line the bottom of little Joey's cage.

How big should the magazine be? This is a crucial decision which will determine your printing costs, and can only be taken after much planning and an appreciation of how many adverts can be sold.

A good bet would be a 64-page main body with a glossy cover, leading to a total pagination (a fancy term for the number of pages) of 68.

Now you've designed your magazine, given it some original page layout and a splodge of top quality editorial. You've even managed to sell a few adverts on the strength of your cheap rates and the magazine's imminent release into a niche market.

Getting in print

It's at this point that you hit the paper barrier - just how are you going to get the thing printed? I phoned Alan Leech at Carlisle Web Offset (the printers of *Amiga Computing*) and asked him for some gen on the publishing business, and where most new customers go wrong.

He told me that, due to the time and paper wastage when starting a print job, the minimum print run for a web offset printer is 10,000 copies.

Web offset printers are the type you see in movies where giant reels feed paper through the printing presses at alarming speeds. While the four presses reach operation speed (one for each of CMYK), about 4,000 sheets of paper are wasted (this is, of course, recycled) which means only larger jobs can be accomplished with any kind of economy.



When at full speed, a web offset printer can output up to 30,000 copies an hour, so turnaround times are often less than 24 hours from the time the films reach the printer to delivery of the finished product. These sort of speeds are essential when distribution deadlines are tight.

To begin a job, Carlisle Web Offset can accept PostScript output from any machine (Amigas included), have it printed to film at Carlisle Studios, carry out any reprographics (scanning photographs or transparencies), then lay the whole lot down on aluminium plates for printing.

For those with little knowledge of the hugely technical side of printing, most companies, Carlisle included, can offer technical advice on what sort of files to supply, along with such essential information as whether the films should be positive or negative, emulsion side down or up, and so on.

Reasonable

As an example of what can be done for a reasonable outlay, I phoned Carlisle's estimating department at Milton Keynes. My fictitious request was for our 64-page A4 size listings magazine, printed on 65 gram BCM paper – Blade Coated Mechanical – which means it is slightly glossy.

The cover was to be printed on 90 gram paper in full-colour and laminated (the cheapest varnish finish), saddle stitched (to you and me this means bound with two or more staples), and delivered bulk-packed on palettes ready for quick freebie distribution (you, me, and a small van).

The price quoted was £4,294 including good quality paper (you could save a few hundred by going cheapie), so if you consider that a listings magazine is certain to be at least 60 per cent advertising (about 40 pages), you'd have to sell each advertising page for only £107.35 each to clear your printing costs.

Not a lot of room for error, perhaps, but with a bit of hard work, a good measure of luck, some business acumen, and a good telephone sales person, it is possible to launch yourself into the publishing arena for a lot less than you would initially have thought.

After that it's up to you, your skill, and the bank manager. Give the punters what they want and you too could fall off a yacht some day.

AC



The best just keeps getting better, and as ever *AC* are on hand to bring you the latest updates first...

AMIGA Update

In this month's Updates we'll start with a preview of the long-awaited revision to Scala. Following close behind comes TVPaint 1.8 – Tecsoft's ever-evolving 24-bit paint package.

A close third comes an impressive update to Quarterback, a program that's been the professionals' choice since the very first Amiga hard drive went AWOL.

Finally, at the rear we have the all-new *Mastering AmigaDOS 2 (vol 2)*, still battling gamely for a place in the medals.

Scala Multimedia MM2.00

I'm sure that regular readers are thoroughly sick of constantly being told how wonderful Scala – the all-singing, all-dancing presentation and multimedia system – is.

Well I'm afraid that's a situation you may just have to become accustomed to, due to its latest incarnation as Scala Multimedia MM2.00.

To draw a comparison, the difference between new and old is similar to that between Workbench 1.2 and 2.0. OK, perhaps I'm exaggerating a tad, but the enhanced features nevertheless look nothing short of astounding, and if the final product fulfils its pre-release promise, even the £199 upgrade price will be bargain.

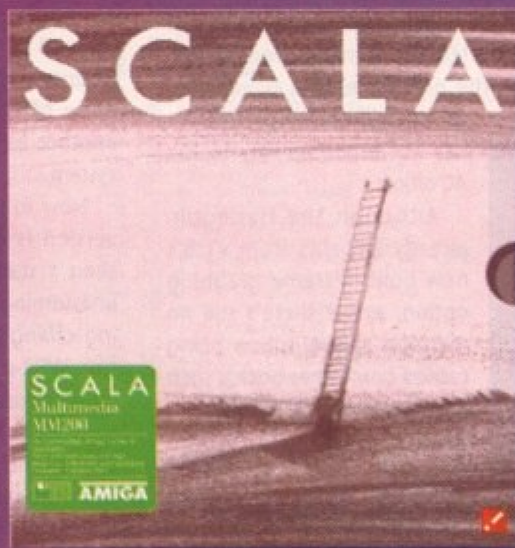
One of the main user-friendly enhancements is the inclusion of the new Scala Shuffle option, which allows the user to view his or her presentation as a series of thumbnails representations appearing as anything from one to 14 images across the page in a series of columns building up to a maximum of 112 individual slides on each.

These new miniatures can be activated by a new main menu Shuffler button which instantly replaces the standard text lines and allows the various thumbnail screens to be moved around within the presentation thanks to a few simple click and drag operations with the trusty mouse. Although the simplified organisation and arrangement offered by the new Shuffle option is a welcome addition, perhaps the most interesting improvement for existing users are a selection of 25 new effects.

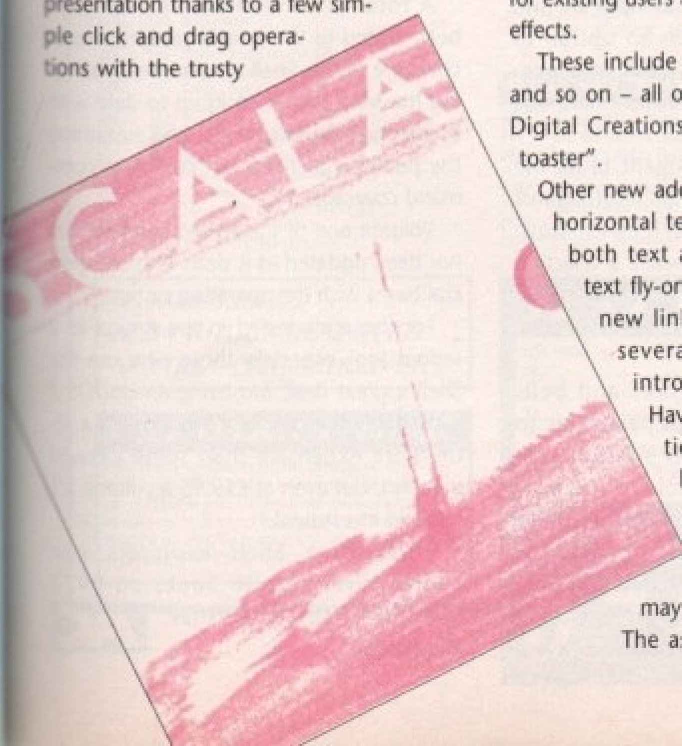
SCALA MultiMedia MM200

The full-fledged multimedia package for the user with professional demands in video-titling, presentations and interactive multimedia.

Comes on 8+ disks packed with backgrounds, typefaces and examples.



The most spoken about presentation and multimedia package has just got better



These include stretch, flow, flip, cube and so on – all of which add up to what Digital Creations claim is "the software toaster".

Other new additions include unlimited horizontal text crawls, outwipes for both text and brushes, improved text fly-on, area transitions, plus a new link feature which allows several selected lines to be introduced simultaneously.

Having seen a pre-production version in Germany last year, I must admit that even such a grandiose claim isn't as unbelievable as it may sound.

The assorted wipes and fades are indeed impressive, and when this is combined with full support for Overscan these two points alone make the new Scala a must for any serious DTV enthusiast.

Aside from enhancements to the interface and assorted special effects, perhaps the most noticeable move in the area of multimedia expendability is the new EX module system which opens the new Scala to an impressive array of additional hardware and hitherto alien programming languages.

Scala comes with six new EX modules which allow access to Laserdisks, still video, Midi, 16 sounds via CDTV, ARexx and the new ECS genlock modes which make it possible to choose a colour other than zero as a potential background colour.

Yet another new option is that of optional sound. Unlike its predecessor, the new software has impressive support for sound with 8SVX IFFs, SMUS, Soundtracker and DDS songs all being acceptable sound sources. No matter what the source, Scala offers full control over volume, fade in/out, balance and playback speed.

To accompany the program's new musical prowess, a novel Record Time feature has been added which allows the user to manually enter display change times, thus providing potentially perfect synchronisation between Midi, video, internal sound and the computer output.

Snapload is a virtual memory option in disguise, allowing you to load anims and digital video direct from hard disk during a presentation.

While in the domain of the artist and animator, the new Scala has extended its artistic repertoire to include DCTV images both in their still and animated form. Again this has to be music to the ears of the average DTV fan...

Interactive

To enhance the program's multimedia appeal further, additional interactive options have been added. The ability to start one script from within another, run DOS applications, send ARexx commands, employ conditional branching, use variables, plus add pre-defined time-outs on interactive pages.

As almost every serious package in the business jumps on the ARexx bandwagon, Scala offers the option to save scripts as ARexx programs which can then be run from – and in concert with – any other ARexx-conversant software.

To add the icing to the cake, a selection of additional Art Libraries are on the way, with a whole array of additional backdrops and typefaces as well as specially composed music and sound samples.

As is the norm with Scala, these additional libraries are unlikely to be cheap, but that's all too often the case if you want the best in the business. As mentioned earlier the update price is £199, while the first-time buyer will need to shell-out a ➤

AMIGA Update

overdraft-inducing £464.12 for the new software.

Although PC-style software prices are something new to the Amiga, Scala is one of the very few packages that are worth such a hefty investment.

The new software is available from Scala UK Ltd. If you require any additional information or wish to buy or upgrade you can contact Scala UK Ltd on 0920 444294.

TVPaint v1.8

If you regularly peruse the pages of *AC* there's a chance you might remember our exclusive review of the amazing Vlab real-time 24-bit frame grabber.

If so, you may also recall that one of the board's many features included direct support for the Harlequin 32-bit display board – a feature which allowed the imported image to be instantly displayed on the Harlequin in all its 24-bit glory without the usual rigmarole of the tiresome save and load procedure. As you may have guessed, Tecsoft, the creators of TVPaint, haven't been slow to take advantage of this feature, and have now taken the next logical step and incorporated Vlab's grabbing features directly into their latest version of TVPaint.

Now thanks to a new requester it's possible to grab from Vlab directly into TVPaint. It's true that the simplified view window and importation controls of TVPaint do leave a lot to be desired in comparison to Vlab's own software, which is now in its much-enhanced third revision.

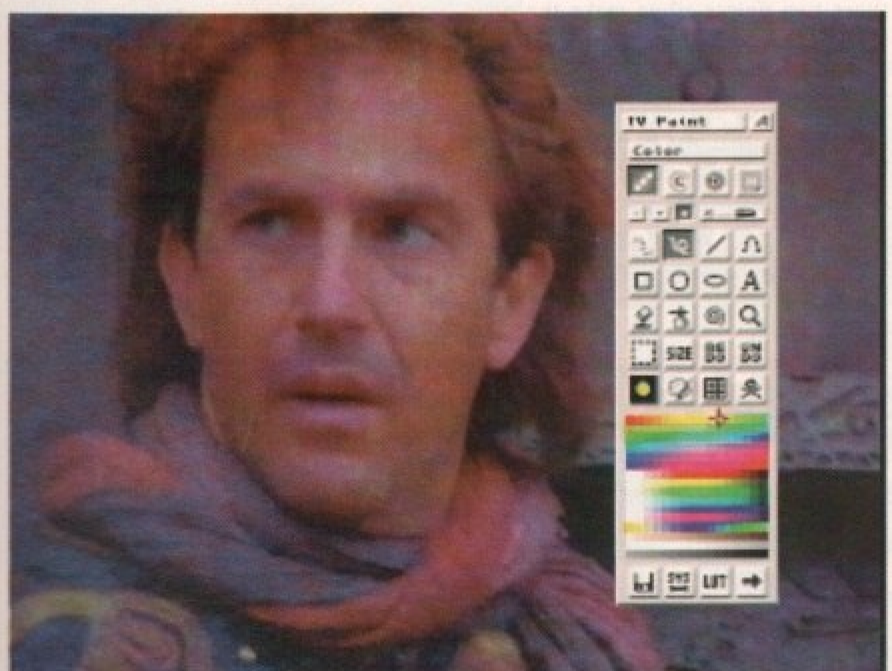
Having said that, the convenience of instant capture and importation go a long way towards make up for the missing whistles and bells of the original software.

Now the TVPaint and Harlequin combination have the final piece of the artistic jigsaw in place. With the system now complete, it's difficult to see a challenger to the Harlequin's artistic crown, with perhaps the only exception being G2's 32-bit release, which as yet has not made its way to the *AC* offices.

Although the Harlequin already benefits from v1.8's new built-in frame grabbing option, as yet there's still no mention of the option being carried onto other boards such as AVideo, the VD 2001 or the new cut-down IV24. As confirmation or otherwise appears from Tecsoft rest assured you'll be the first to know.



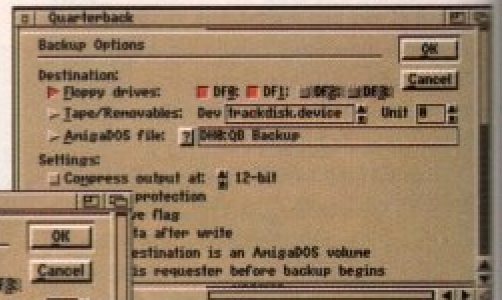
How to lose friends and insult people with the Harlequin and Vlab combination



It's Hollywood's Mr Nice Guy frozen forever, thanks to TVPaint 1.8



Just like the Backup options, restoration is also fit to burst with impressive enhancements



Quarterback was always a favourite for serious users but the latest upgrade makes it an essential

Quarterback v5

After a long time in search of Amiga stories and interesting users, I'm yet to meet a serious Amiga fan who doesn't have a copy of Quarterback in one form or another lurking somewhere within their system.

Now in its fifth incarnation, the latest version is more akin to a new product than a standard upgrade, as its rather unassuming title suggests. The most striking change is the implementation of a new WB2-style front end complete with a new requester-driven preference .

Thanks primarily to the simplified organisation and an impressive array of new features, v5 is by far the most flexibe and easy to use backup and restoration system on the market, boasting an array of storage mediums that make the floppies-or-nothing options found on most backup programs pale into insignificance.

Aside from simple floppy storage, the new version offers the opportunity to back-up onto tape streamers, not to mention an unlimited assortment of removable media such as opticals and hard disks. There's even an option to backup your valuable data to a pre-defined directory on the resident hard disk of your choice.

To assist the management of all the new options, a new SCSI interrogator details all available devices for both backup and restoration, while a selection of ten definable macros wait for regular users to custom to their specific requirements.

Other assorted whistles and bells include options to assign passwords to stored data, define buffer sizes, include assigned directories to volume lists plus complete control over catalogue information.

In short, the new version puts what was already a market-leading product into an almost unassailable position. If you have a hard drive and want to keep its contents safe and sound, the new Quarterback is quite simply the expert's choice.

Aside from essential backups and personal data security, perhaps the biggest bonus of the Quarterback is its widespread use throughout the Amiga community.

If you're likely to be moving large amounts of data to printers, publishers or in fact any consumer of mass information is sure to have a copy on-hand.

If you want more information or wish to make an investment in the all-new Quarterback, contact Silica Shop on 081-309 1111.

Mastering AmigaDOS 2 (vol 2)

Probably the most useful and approachable AmigaDOS reference work available, *Mastering AmigaDOS 2* (MA2) suffered until recently from its early appearance before the latest 2.04 version of Workbench was released.

With the revised volume now on the shelves, though, users of A500 Plus and A600 machines have no excuse for not diving into their Amigas and doing a bit of exploration.

A total of 25 new commands have been added to the book's comprehensive coverage of the Shell environment, bringing the MA2 reader bang up to date with Workbench developments, and sustaining the publisher's claims to "complete command coverage".

Volume one of the two-volume set has not been updated as it deals in more general terms with the operating system.

For those interested in the Amiga as a serious tool, especially those who use the Shell a great deal, *Mastering AmigaDOS 2* is probably the best buy around. It's a little more expensive than some I could mention, but even at £19.95 a volume it's a sound investment.

Prospective Shell explorers can contact Bruce Smith Books on 0923 894366 for further information.

Logitec Kidz

This has to be the cutest mouse in the test. I dare you not to go "ahh, innit luvly".

As you've probably gathered, the Kidz mouse is actually mouse shaped. The cable comes out of the rear of the casing and curls round to look like a tail, with little blue ears that act as buttons.

It's easy to tell that this mouse was designed especially for children because it's far too small for anyone with large hands to control it properly.

I personally have hands like shovels so I kept losing it but we gave it to people with smaller hands and they loved the feel.

Logitec have gone to a lot of trouble developing this mouse. The main difference between the Kidz mouse and a normal mouse is the size of the tracking bal.



It's been shrunk from the standard 2.5cm to 1.5cm, which doesn't sound like a lot, but makes a hell of a difference to movement response.

It's not the most accurate mouse you can buy, but the manufacturers' specs pegged the resolution at 200dpi, which isn't bad. Anyway, accuracy won't be that important on applications for children.

Supplied by: Logitech UK Ltd
Phone: 0753-537222
Price: £37.60
Feel: Good, but only for small hands.
Smoothness: 6
Speed: 5
Overall: 7

Itsa



The name describes the package quite well – it's a mouse and that's all. Unlike a lot of the other packages you get nothing but a mouse – no mat, no house and no cuddly toy. No giveaways means a lower price, which is the Itsa's main feature.

It's a bog standard mouse with absolutely no special features, but to be fair it does a more than adequate job. The resolution is good and the tracking speed is up to a good standard.

It's got two buttons, which is supposed to be a draw back. I've never yet come across an application in which you must use all three buttons. As usual it has the machine switch for ST or Amiga on the underside of the casing.

The main drawback isn't really the performance of the mouse but its appearance. The casing is a horrible shiny plastic and the shape's a bit clumsy, similar to the Contriver mouse only a bit slimmer.

Supplier: Meridian Distribution
Phone: 081-543 3500
Price: £12.99
Feel: Good but feels a bit cheap
Smoothness: 7
Speed: 5
Overall: 6

Golden Image optical



Overrated and not much use just about sums this one up. The optical mouse is an absolute waste of time – it's less accurate and slower than the budget models and two or three times more expensive.

The body itself is a pretty poor shape and because of the absence of a trackball it's far too light to get good control over.

It will hardly, if ever, need maintenance because it has no trackball so if you have a serious aversion to cleaning mouse balls then rush out and buy one now .

The point about low maintenance is a valid one. If you work in a moderately dirty environment like a building site office, or a very dirty environment like the *AC* office, then the track ball in your mouse will get clogged with gunge and subsequently bung up the rollers that sense the movement of your mouse.

Another terrible feature is the shortness of the cable – three feet the box said, which sounds like a lot but isn't really enough room to operate it properly. If you are a left-handed 500 Plus user then the mouse would be more or less useless because the cable doesn't reach across the casing.

Not worth having except to be able to say "I've got an optical mouse".

Supplier: Ladbroke
Phone: 0772-203166
Price: £38.99
Feel: smooth but too light
Smoothness: 7
Speed: 4
Overall: 5

sQuik



Budget hardware of this standard doesn't crop up every day. If you're looking for a replacement mouse for your Amiga or Atari ST then you can't really go wrong with this one.

You don't get any freebies with this package, just the mouse, the standard of which is brill. The design is basically the same as a Naksha with a slightly a wider profile. The body is made of good grippy plastic and it's nice and heavy. Whoever makes the sQuik mouse really knows how to upset the big companies – the tracking speed, which clocks at 290dpi, is faster than the Naksha and the Golden Image.

It runs as smooth as glass and is the fastest mouse we've had in. The only drawback is the buttons, which clunk just like on an original Amiga mouse.

Supplier: Trilogic
Phone: 0274 691115
Price: £14.95
Feel: Very good, pity about the buttons
Smoothness: 6
Speed: 9
Overall: 9

Contriver

Another cheap and cheerful model, this one's been around for a while but is still a viable option for a replacement.

The first thing you notice about the Contriver is how cheap and nasty it looks. It has a very wide body and two massive buttons.

Speaking of buttons, a valid point that one of the *AC* team made was the fa[ct] that no manufacturer had made a[n] ambidextrous mouse. A mouse should be made that has a switch on the side to change the button function, making left right and vice versa.

The casing is the same horrible "made in Taiwan" plastic as the Itsa but looks aren't everything, as they say. At 220dpi this is one of the the slowest we tested.

This isn't necessarily bad – I like slow mice to a point because I don't like my pointer to go whizzing around the screen so fast that I can't see it. But if you're short of desk space then this isn't the one for you.



The Contriver is one of those mice you will either love or hate. It's like driving a 2CV – cheap and very reliable.

Supplier: Trilogic
Phone: 0274-691115
Price: £12.99
Feel: Cheap and nasty but try yourself
Smoothness: 6
Speed: 6
Overall: 5

Naksha

As usual, there is no substitute for quality. Naksha are always one of the companies mentioned when you ask people about quality mice

To look at the mouse it's relatively unremarkable but once you've used it, it's a different story. It's fast and very, very smooth and unlike the sQuik the buttons don't clunk because Naksha have used good quality micro switches. The body's good and heavy with a really sturdy feel to the build. Best of all are the freebies with the package – you get a nice mouse house that sticks to the side of your screen and a very good mat.

But it seems that the budget mice are still the fastest of the lot – the sQuik mouse beats Naksha's 280dpi by 10dpi, so if you're worried about desk space then I would go for the faster sQuik.

To finish off the package, Naksha have thrown in a corking game. Operation Stealth is a completely mouse-driven

Logitec Pilot

Logitec can always be relied upon to give you a no-messing quality piece of hardware. They do put a lot of research into their field and don't make clones, which is a relief because all mice seem to be copied off each other nowadays.

The Pilot has got quite an unusual shape – I've only ever seen similar on a Champ mouse for the PC. You don't get anything with the mouse, but that's the price you pay for quality. The mouse Itself is an arch shape that fits surprisingly well into your hand. It has long dual buttons that are set back from the nose of the mouse.



Major points seem to have been overlooked on this design. Unlike the rest of the mice we looked at, the Pilot doesn't have a machine selector button so presumably they will have different models for the ST and the Amiga.

It works on an opto-mechanical system – this means the movement of the trackball is being read by light. Usually the movement is tracked by small cogs that rotate with the ball, but opto-mechanical mice have a light gauge which senses the movement of the rollers.

Opto-mechanical sounds very grand but it doesn't do that much, and it doesn't make that particular mouse an optical mouse. However, it does make your mouse last longer because it has fewer moving parts, and it's slightly more accurate.

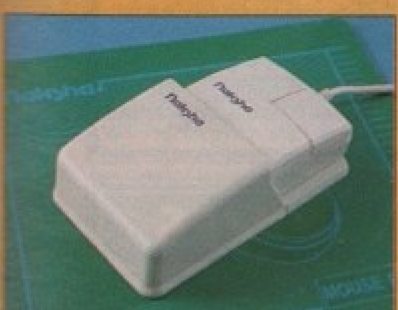
Supplier: Logitec UK Ltd
Phone: 0735-537222
Price: £32.31
Feel: Definite quality, comfortable
Smoothness: 6
Speed: 6
Overall: 6

Rodent control

Ben Styles looks at buttons, balls and all things mousy



Mice – those rodent-like input devices that the computing world goes such a bundle on. Big and small, stupid and serious, we've checked through them all. Here we give you a run-down on the good-but-not-too-outrageously-priced models.



adventure spy thriller that lots of magazines raved about.

Just to make sure you'll be able to play it, they have supplied the game on ST and Amiga formats

Supplier: Trilogic
Phone: 0274-691115
Price: £24.99
Feel: Very nice – feels like real quality
Smoothness: 8
Speed: 7
Overall: 8

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Your Amiga produces fine quality hi-fi stereo sound. Enjoy quality stereo sound reproduction *to the full* with this new design twin speaker system! Incorporates a built-in amplifier with separate adjustable volume controls for each speaker unit. Runs from PSU (supplied) or from batteries (not included).

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At a genuine 400dpi scanning resolution, this new scanner produces truly superb quality scans. Has a full 105mm scanning width, variable brightness control and 100 / 200 / 300 / 400dpi resolution. **Daatascan Professional Version 2** scanning *and* editing software allows real-time scanning in either line art or in up to 64 simulated grey scales. Provides powerful editing features and excellent compatibility with most DTP and Paint Packages, eg. Deluxe Paint 4, Touch-Up.

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TRUEMOUSE



WE GUARANTEE that this is the smoothest, most responsive and accurate replacement mouse you can buy for the Amiga. Excellent performance, now with a 300dpi resolution. Amazing new price!

£14.99 *SATISFACTION GUARANTEED*

GOLDEN IMAGE OPTICAL MOUSE Amiga/ST compatible - excellent travel+accuracy assured. **NEW LOW PRICE!.. £ 29.00**

ROCGEN GENLOCK MK.II

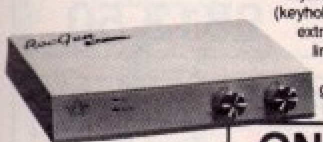


OFFERING EXCEPTIONAL VALUE FOR MONEY, this fully compatible GENLOCK adaptor offers levels of quality, function and sophistication not normally available in this price category. Special features include the ability to record graphics & animations on video recorders and overlay graphic and text onto video. Capable of smooth and stable fading and overlaying effects with special tuning knob.

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ROCGEN PLUS

Compatible to any Amiga or Commodore CDTV, this NEW Genlock Adapter provides Advanced Special Effects and Performance Features without sacrificing user-friendliness!



New Special Features include: Dual Dissolve control knobs providing freely adjustable degrees of overlay or invert (keyhole) effects; Auto Video pass-thru; extra Video throughport for separate line monitoring; RGB pass-thru for real-time editing of Amiga graphics; plus Key-In port for use with an external keying device.

ONLY £119.99

PHILIPS 15" TV/MONITOR



With its dedicated monitor input, this model combines the advantages of a high quality medium resolution colour monitor with the convenience of remote control Teletext TV - at an excellent low price ! Features dark glass screen for improved contrast, plus full range 3-way speaker sound output .

£269.00 Including VAT, delivery & cable

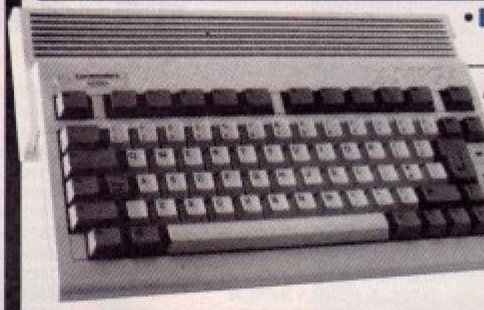
Philips CM8833 Mk.II Monitor (Genuine UK version), includes cable and 1 Year on-site maintenance .... £ 219.00

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A590 OWNERS! Expand your hard disk storage further with one of our add-on, externally cased SCSI Hard Drives, with 25ms autoparking NEC mechanisms and separate power supply. Plugs into the socket provided on the rear of the A590 unit.

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INCLUDES 12 MONTHS ON-SITE WARRANTY, 'DELUXE PAINT' & EXCITING GAME TITLE!

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We are now able to supply Amiga A600's with larger hard disks. We take a standard single drive A600 and install a high quality 2½" IDE hard drive.

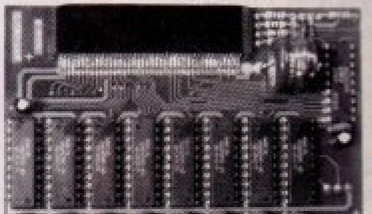
A600 with 40Mb Hard Disk........£ 479.99
A600 with 80Mb Hard Disk........£ 579.99
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All models available with 2Mb RAM – Please add £40.00

– Please note that the hard disk installation is not covered by on-site warranty –

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UPGRADE YOUR NEW A600 TO 2Mb WITH THIS SIMPLE PLUG-IN MEMORY UPGRADE!



- ☆ Simply Plugs into the A600's trapdoor expansion area
- ☆ Increases total RAM capacity of A600 to 2Mb 'ChipRAM'
- ☆ RAM Enable / Disable Switch
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SWITCHING BETWEEN VERSIONS OF KICKSTART ON YOUR A500 IS EASY WITH OUR NEW ROM SWITCHER!

You can improve software compatibility on your A500 Plus! By fitting our ROM switcher, you can alternate between the Kickstart 2 already resident and another version of Kickstart ROM chip, giving you the freedom of choice. Fitting is very simple indeed, and requires *no soldering* or special technical knowledge. Fitting allows two methods of switching; either by keyboard reset, or by an external toggle switch. **N.B. Kickstart ROM not supplied. A500 Revision 5A boards will require circuit modification.**

ONLY £24.95

Kickstart 1.3 ROM supplied separately ....only £29.95
Kickstart 2.0 ROM supplied separately ....only £39.95
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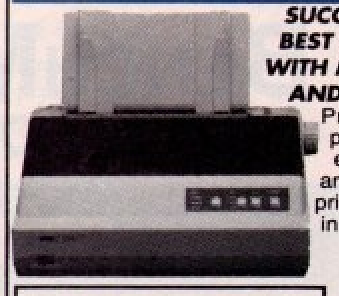
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Ezra Surf's Postbag

Got something to say through the pages of AC? Ezra Surf is our mailman, dedicated to sitting in a corner reading your letters and selecting the most interesting for publication.

Drop him a line at:

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Please don't enclose saes as Ezra just hasn't got enough paper to reply personally. He might also have to shorten your letters, so don't be offended if you end up getting the chop.

Surviving software

May I take the opportunity of bringing to your attention a new piece of software called "The Survival Game" from Intracom? I found it refreshingly educational as well as easy to use, and am compelled to ask why is it that other programmers are unable to provide products of such good quality and at such a reasonable price?

The products I have bought in the past that have been reviewed in magazines such as yours have never borne any true resemblance to the reality of what I have received, and some even appear unfinished! It cannot be said in this case.

Moira Shepherd, Halifax

It's good to hear from a satisfied end user, especially concerning software which is so often a sore point with disappointed customers.

Sadly, as you point out, not all software companies are capable of reaching the high standards demanded from most users these days. I can only suggest that you try to test a piece of software in your local dealers before buying it.

If this is not possible and you buy a real lemon which was advertised as the best thing since sliced silicon, contact your local Trading Standards Office and return the product with a demand for a refund under your statutory rights as a consumer.

If you refuse to take "no" for an answer and put the wind up them with a mention about the fair trading laws, your rights, and the TSO, most companies will become refreshingly helpful.

Hari Kiri disk

Earlier this year I received some money for my eighth birthday and purchased a copy of First Samurai by MirrorSoft from a company called Turbosoft.

To my dismay the disk wouldn't load, so I sent it back to the address quoted in the instruction manual, which says I should allow 28 days for delivery of a new disk.

To my disgust I found out that the company was owned by Mr Maxwell, and had gone bust. I then tried to contact Turbosoft but I now believe that they are no longer trading! Can anyone help?

Where is my faulty disk and is there no way I can get another copy of what is a fabulous game? What about the new company who are selling First Samurai? As I said earlier, I am only eight years old and £20 is a lot of birthday money to me.

Kevin Crawford, Stirling

The only company I can track down who are distributing First Samurai at the moment are UbiSoft (081-343 9055), who are selling it as part of a compilation. As they didn't sell you the game in the first place, they are under no obligation to replace the disk, but if you phone them and ask very nicely, they might be able to help you out somehow.

Sorry to hear of your predicament, but the number of people who lost enormous sums of money when Cap'n Bob went belly up seems to grow every month, and there must be plenty of former customers in a similar situation.

Your only other hope is to try to contact the liquidators of the original software company and explain what has happened. As long as your letter and disk arrived at the company's offices, they should be able to at least put you in the queue for compensation.

FMG – the battle continues

My A590 hard drive broke down recently, so I phoned FMG, Commodore's national repair centre. The staff, who were helpful and courteous throughout, first of all suggested what

Polish polytechnic plea

Prize letter

Having blood ties in Poland, I have made several visits to the country and watched its progress towards a free market economy.

The Amiga is fast becoming recognised in the whole of Eastern Europe as a machine for serious applications, so I am trying to make moves to assist students and enthusiasts in Poland towards building their own sources for reference.

Being a subscriber to several periodicals, I have accumulated a substantial collection of magazines over the years, among them *Amiga Computing* issues 4 to 48.

The collection has now been donated to the library at Warsaw Polytechnic, but in addition I have also advertised the donation in Poland, inviting the public to utilise the material as a reference source.

However, this collection of magazines is already just a historical reference, and must be kept up to date. There are many private individuals who subscribe to Western magazines and some shops carry limited supplies, but the libraries with their limited resources urgently need as much assistance as possible.

What I would like to do is ask your magazine to add to this library by donating a subscription to the Warsaw Polytechnic. I regard libraries as great social assets and the knowledge contained within them reflects the scope and enlightenment of the society which builds them.

On my next visit, I will attempt to start a decent PD library in Poland, and perhaps a BBS, and any assistance your readers could give would be greatly appreciated.

Please print my name and address along with that of the library so that your readers can contact me.

Mirosaw Nader, Warsaw

We are only too glad to help struggling Amiga owners and enthusiasts in Eastern Europe, so by the time you read this reply, your subscription should be on its way to the library. Best of luck in all your future endeavours.

For the benefit of any of our readers who care to assist our Eastern European friends, the address to contact is:

Dr Mirosaw Nader
Instytut Informatyki
Wydzia Transportu
Politechnika Warsawa
ul. Koszykowa
Warsawa
Poland

Get your thinking hats on and figure out a way to extend a hand across the remains of the Iron Curtain, folks!

might be wrong with the A590, then when I was unable to fix it myself told me they could repair it for £95 including the cost of sending an engineer out to me.

I agreed to this and within three days I had been loaned a replacement A590 while the parts necessary to repair mine were obtained. The result was that in less than two weeks I now have a working hard drive again.

I would like to take this opportunity to thank all at FMG for the outstanding service I received. After the several complaints that your magazine has received about FMG's standard of customer service, I felt I must write and give you the other side of the matter. I am not an FMG employee, just a satisfied customer.

D M Holloway, Worthenbury

Glad to hear you are satisfied with FMG's service! As this issue seems to provoke more than the usual crop of letters, we've decided to keep a running tally.

So far the score is drawn at one-all, but this can change if we get enough letters from FMG customers with positive or negative reports.

Of course, with the recent news that FMG have gone into liquidation, this exercise is more a post-mortem than anything else!

Shoddy coding?

I am writing to complain about some games manufacturers. Recently I bought a megaboard RAM expansion to increase my A500's memory to 2Mb.

When using it on Wordworth it worked fine, but when trying to run Project X and various other games they just crashed.

I assume the memory is all right as I have had no other problems. The only way to get the games to work is to open the Amiga and remove the board and Gary chip connector.

Manchester Utd Europe is a good game as it can sense the board's presence and use it. Why don't other games companies do this or at least stop the game from crashing when I try to run it?

T Fowle, Wymondham

It can be difficult for games companies to take all the third-party peripherals into consideration, as there are so many around and not all of them work in a perfectly OS-legal way.

From your letter, it is unclear whether the games or the expansion board is to blame, but you should at least contact the companies concerned to let them know of the problem.

Games which are fussy about fast memory used to be more common on the Amiga, necessitating the use of the NoFastRAM utility to kill the extra memory before warm rebooting with the game disk.

Problems such as this are rare these days, but they still happen, so for the moment try using NoFastRAM or a similar PD utility to switch off your extra RAM without having to open the Amiga.

Poor postman

Your magazine is very good, but your distribution department is less so. European readers should be warned that when they subscribe to *AC* they probably won't get the magazine when it appears in England, but three weeks or more later, as happens to me every month.

So what is the idea of subscribing then? I have complained, but my letter was apparently distributed directly into the trashcan. Don't deceive people into advancing a lot of money when you cannot deliver in a reasonable time!

Two competing magazines to which I also subscribe always arrive around the same date as they come on the English news-stands. That's what people expect when they subscribe.

If you don't print this then you should at least give European readers some similar information about the delay. Anything else would be unfair.

Guri Refsnes, Oscarsgate, Norway

There is an unavoidable delay when sending copies of the magazine overseas, Guri, but the three week delay you seem to be suffering is unacceptable. Perhaps it'd help if I explain a little of how our distribution system works.

Our magazines are sent to the subscription department at the same time as the rest go off to our wholesale distributors, Comag.

There is then a period of four days or so before the mags hit the news-stands, during which time the subscription issues should be in the post.

News-stand magazines are flown to all overseas distributors, but for subscription issues we depend on the speed of the local postal services and delivery times are therefore a bit varied.

You should, however, receive your magazine, even overseas, no later than about a week after we hit the British news stands.

We could use a faster postal service when sending out subscriptions, but this would result in our very competitively priced subscription rates being increased – they are presently cheaper than any competitor magazine.

We don't think that the majority of subscribers would be prepared to pay the extra, but if huge numbers of you write in with your comments on the situation this could change. What do the rest of you think?

Industry reply

As the piracy debate has raged on, we've made a few stabs at provoking a comment from the games software industry in the hope that the other side of the story can be put straight from the horse's mouth.

The following is the first letter we've received from the industry on any piracy-related topic:

As a specialist games dealer, I feel it's high time I entered the piracy debate.

I don't think that the readers of *AC* realise how seriously the actions of pirates are affecting the software industry. How many of you can put your hands on your hearts and say "I have not copied software"? Not many, I'm sure.

Even by accepting one copied game from a friend you are contributing to the end of the Amiga!

I bet you're thinking: "This guy's talking rubbish. How can one copy spell the demise of the Amiga?" Well, let me explain. We are about to stop stocking Amiga software because we just don't sell any. "So what?" you're probably thinking, and if it were only our shops destocking Amiga games this would be fair comment, but it isn't.

Independents up and down the country have had enough. Even the big shops have pulled the plug. Check out the aisles in Toys R Us and you can count the Amiga games on one hand. Of course, you can always buy mail order, can't you? Or can you? Think about it logically and you will realise that once the shops stop stocking Amiga software the publishers will stop releasing new games.

They are, after all, in the business of making money, and without the prospect of a substantial number of outlets for their product they will find something else to sell.

The same could be said for the PC except for one huge difference. The PC is basically a business computer that happens to have some games, whereas the Amiga is a games machine with a smattering of applications software.

In other words, without games the PC will survive, but the Amiga will curl up and die.

If after reading this your readers can't see the damage they're doing by accepting software from pirates, then I can only assume they're the sort of people who's still using ozone-depleting aerosols because "one can of hairspray won't make any difference".

D Pickett, Managing Director,
The Game Byte, Stockport

Software retailers are in a unique position in that high prices and piracy both hit hardest in the retail sector, and both are beyond the control of the person trying to make a living from selling software.

However, the analogy between piracy and aerosols is a fairly weak one. Aerosols containing CFCs cause ozone depletion, a scientific fact which has been accepted virtually the world over.

However, the supply-demand chain is an artificial economic system totally unlike a natural phenomenon, and to ascribe one factor as the main cause of the retailer's woes would be over-simplistic.

The continuing popularity of budget games, judging by our Gallup charts, shows that software which is older and in most cases already widely available in its cracked or pirated form will sell in numbers as long as the price is right.

Piracy is wrong and should be stamped out, but so should ridiculously high prices.

This doesn't help the retailer, who must feel a little bit like pig-in-the-middle, but perhaps if the National Association of Specialist Computer Retailers (NASCR) took some sort of official position on soaring prices and low quality over-hyped software, we would see the games houses begin to take notice. Many of them so obviously do not listen to the punters.

The great Sequencer One Plus spectecular...

COMPETITION

As ever, *AC* brings you the very best prizes in the business. This month we have six copies of the latest stunning release from Gajits Music Software.

For amateur and professional musicians alike, Sequencer One Plus offers perhaps the ideal introduction to Amiga sequencing and the world of Midi.

Even if you have no Midi hardware at hand, Plus offers you the opportunity to express your musical aspirations thanks to the software's extensive support for the Amiga's built-in sample-playing features.

If you're still not convinced that Sequencer One Plus is the best thing since sliced silicon, just check out this month's Almanac Music column for a definitive review of the new enhancements available from this stunning upgrade to Gajits' original Sequencer One.



You are a winner...

P O'Neill	Halesowen, West Midlands
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A Forster	Sheffield
Nick Pruce	Newromney, Kent

All the lucky readers above now have machines bulging with additional RAM thanks to *AC*'s amazing Microbotics' MS01 memory expansion giveaway...

Don't miss your chance to cash in on your knowledge of the Amiga and the luck of the draw in this month's *AC* sequencing bonanza.

To enter, all you have to do is answer these three simple questions and get your entry in the post ASAP. It's as easy as that.

ENTRY FORM

Questions

1. What is a "demisemiquaver"?

- ☐ A small, crisp-style snack
- ☐ A diminutive Italian opera singer
- ☐ A form of musical note

2. What is the phrase "sys ex" short for?

- ☐ A deceased member of your immediate family
- ☐ System exclusive information
- ☐ A generic term for patch editing software

3. What are "double inversion, polyphonic, multi-timbral pulse filters"?

- ☐ High quality sound compression routines
- ☐ Small hairy creatures with disgusting table manners
- ☐ A complete load of utter cobblers we made up at the last minute

Tick the appropriate box and send your entry to Plus Competition, Amiga Computing, Europa House, Adlington Park, Macclesfield SK10 4NP.

Name ____________________

Address ____________________

____

Daytime telephone ____________________

Please tick this box if you do not wish to receive promotional material from other companies ☐

Expensive upgrade

I own an A500 with A501 RAM expansion. Is there a product on the market which will enable me to use A2000 cards and/or internal drives? Are there any power supply or compatibility problems?

Several months ago, I read about such a system made by Checkmate Digital, but I have not seen it advertised for a while.

If it is possible to use cards and/or internal disk drives, buying add-ons would be much cheaper (£90 cheaper in the case of the GVP 52Mb hard drive) and I would be able to take advantage of many peripherals only available as cards for the A2000.

Is this a good route for upgrading?

Adam Chringer, Henley-on-Thames

The HiQ Tower system from Checkmate Digital is a system designed more as a top-end A2000 replacement than an A500 upgrade path. It offers much more room for extra drives and cards than an A2000, but is rather expensive if all you need it for is to take advantage of a couple of A2000 peripherals.

The only other option is a Bodega Bay unit, which offers four Zorro II slots. This is again a rather pricey unit, and is fairly bulky, though it has the advantage of simply slotting into your A500 DMA port. Phone ZCL on 0543 414817 for details.

My advice to upgraders such as yourself would be to sell the A500 and put the money towards an A1500/2000 base unit, which can be purchased for about £500 these days.

This is only £100 more expensive than the add-on system boxes described above, which should leave you £100 from the sale of the A500 to buy new peripherals.

Alternatively, you could hang on a few months more and check out the new Amigas due for release in late Autumn. If, as we think, they are released with the AA chip set, they will be something very special indeed.

Programming choice

Can you tell me which is the best programming language for the Amiga? Is it Amos, Easy Amos, Amiga Basic, C, Devpac 3, 68000 machine language, or AmigaDOS?

There are so many of them around, where do you start? I am about to take an A-Level computing course, so I need to know which would be best.

Michael Stanlow, Scunthorpe

The programming language you choose depends entirely on the sort of programming you want from it.

If you are going to concentrate on games, then Amos is the obvious choice, but if your efforts will be mostly aimed at using the Amiga's operating system, you should go for C. As a serious tool for development, Devpac 3 is probably the Amiga's number one choice, though your A-Level course may not require the sort of advanced programming involved in 68000 machine language.

If you intend to carry on your programming endeavours and use the Amiga to its full potential, Devpac is the package for you. Otherwise, stick to C or Amos.

Don't even consider Amiga Basic. It's garbage and Commodore don't support it any more, but if you really want to program in Basic you could opt for HiSoft Basic or GFA basic.

Both of these can be compiled and both have been optimised to make best use of the Amiga's special features. Good luck!

Printer out of puff?
Computer cracking up?
We're here to help!



AMIGA COMPUTING ACAS ADVICE SERVICE

Write to ACAS, Amiga Computing, Europa House, Adlington Park, Macclesfield SK10 4NP

Save your saes – we can't reply personally

What's the score?

As an observer of the Amiga, before I bought my A500 Plus, I was extremely impressed by its musical abilities. I now want to write music on my Amiga but am completely ignorant of the availability of composition software.

This is what any potential software would have enable me to do:

1. Write the music on-screen using standard musical notation.
2. Play back the music immediately through the Amiga's four sound channels.
3. Print the notation to paper.
4. Write for up to 32 instruments in notation on one page for printing purposes. I write orchestral music, and you have no idea how laborious a process it can be to write three pages of 32 stave music.
5. Store a group of sound samples – ideally string instruments which I can play back in a realistic-sounding form.
6. Be idiot proof.
7. Be able to save music to disk so I can load it later and go back to it.
8. Be reasonably priced.
9. Work on my standard A500 Plus without me having to spend a fortune on extra RAM and so on.

All I can find in my local Amiga shops is games and more games, so any suggestions would be greatly appreciated.

M Reynolds, Gt Yarmouth

You don't ask for much, do you? There are a few packages around which fulfil some of your requirements, but very few which come close to meeting them all.

Your best bet would be the Copyist or Copyist Apprentice software from Zone Distribution (081-766 6564). This software will enable you to write in standard notation, but whether or not it has the ability to compose and play back samples I can't tell you as I've never used it.

Phone Zone Distribution and ask them for some advice on the matter. They stock most decent music packages and should be able to fit you up with the software that best suits your needs, though I think you should be warned that this sort of highly specialised software isn't usually completely user-friendly and is even less likely to be cheap.

Ah dinnae kern

When I was using a proportional font with my favourite DTP program I noticed that the proportional bit was not all it could be. Some letters were banged up together and others were further apart than the words.

I loaded FED, the Workbench fonts editor, and had a look at the font's Kern, Space, and Width values, which seemed to be all over the place with no logic at all.

I set all the kern values to zero and the Space values to one greater than the Width, then saved it back and it looks a lot better.

Now for my plea for help. What does the Kern value do? I know that it has something to do with one letter overlapping the space occupied by another.

I also know that the Width is the number of pixels that the data for the letter occupies, and the Space is the number of pixels used on-screen for that letter. Could you please explain how the Kern value affects the rendering of the font characters?

Dave Mills, West Bridgeford

Kerning is the process whereby two specific characters are squeezed closer together or given a little more breathing space, and it differs from "tracking" in that it is usually applied to given troublesome character combinations, such as "AV", the traditional illustration for this technique.

How kerning works will usually depend on which wordprocessor or DTP package you are using, but in general a positive kerning value will create space between two letters, and a negative value will remove the space and fit the letters more closely together.

Tracking, usually applied to space a line of text out so that it fits better into a given space, is used across a whole group of characters or words.

The problem with your proportional font is that you seem to have managed to transform it into a non-proportional font.

The whole idea of proportional fonts is that the individual characters have kerning values already set so that they fit bet-

ter with one another. This may sometimes result in a messy on-screen picture, but did you try printing your text in NLQ or graphics mode before you messed with the font?

You may find that your new font with its uniform values looks better on-screen and worse on paper.

Dodgy games

I recently bought a second-hand Amiga 500 with Workbench/Kickstart 1.3, which I intend mainly to use as a wordprocessor and desktop publisher with the eventual addition of a hard drive.

When using QuickWrite and PageSetter 2.0 the Amiga is great, but when using certain games, such as Final Fight, Lotus Turbo Challenge, and some demos, the last few lines of the screen are cut off and in some cases appear in another part of the screen.

This is definitely not because my monitor is out of tune, as there is still space under the main game screen area. Some games such as Super Monaco GP won't even work, and just load so far before crashing.

I'm sure the software can't be at fault because the games work fine on a friend's Amiga – a fairly recent model, though not a Plus – with the whole screen intact.

I'm not sure what revision number my Amiga is, but I do know it has a red power light and green drive light unlike some later models, and that it has an ECS 8372A Fatter Agnus and 0.5Mb RAM expansion, both of which were fitted by the previous owner. Do I need to upgrade my system or is it a professional repair job?

Andrew Griffiths, Macclesfield

If your productivity and Workbench software loads without the sort of problems you've been encountering with games software, things get a bit more baffling, but if the same thing happens with all software, you're obviously suffering from some fritzed video circuitry.

The problem could be almost anything, but to whittle the possibilities down you should scrounge a TV modulator from a friend who doesn't use a monitor and try the Amiga's RF output.

Next, use a simple phono cable and see if the composite video (CVBS) output has the same problem.

If the same thing happens with all types of video signal, the chances are that your Agnus or Denise chip is acting up, which would necessitate a replacement.

If not, it could still be your monitor or monitor cable, but a more likely candidate is your RGB port. Either way, I'd recommend you send the Amiga for a professional repair.

AMIGA COMPUTING ADVICE SERVICE

Plus RAM

After buying an A500 Plus I feel the need to expand its memory, as when creating animations or working in HAM art packages I am fed up with seeing the message "not enough memory for operation".

I would like to expand to 2Mb chip RAM and 1Mb fast RAM, but how would I go about this? I know there are 1Mb RAM cards for the trapdoor to give the Plus 2Mb of chip RAM, but are there boards which allow more?

Some older software won't work without fast RAM, so a bigger board would be of more use.

Martin Giles, Solihull

There are two obvious RAM upgrades for your purposes. One is from Power Computing (0234 843388) and the other is from Ashcom (0483 740664). Both are external boxes which fit in the DMA port on the left-hand side of the Amiga and both can hold up to 8Mb of extra RAM.

The entry-level models come with 2Mb each, which would give you the 2Mb chip and 1Mb fast RAM you require, but the bad news is that they both cost over £100.

Check out the prices in this month's magazine and Amiga Mart section, then go for one or the other. In terms of quality there's little to choose between them, so it all boils down to price.

Epson compatible?

I have two problems which I hope you may be able to help me with.

Firstly, I cannot use my Panasonic KXP1081 with my Amiga despite buying what I was told was the correct cable for it. Does anyone have the correct printer driver for this printer, and can I get a copy, or have I been supplied the wrong cable?

I have an Epson printer on loan but would prefer to use my Panasonic.

Secondly, I started off with the A500 Plus Cartoon Classics bundle and bought Platinum Works for my office work. This program has worked well for me but I was concerned the other day when writing up minutes for a meeting, because after only five-and-a-half pages I got an insufficient memory message. Surely a 1Mb machine should be able to handle more than this?

Could someone please let me know if this is correct, and how would I go about increasing the directly accessible memory for use with Platinum Works?

Mrs Cantlay, Mkushi River, Zambia

The Panasonic printer you describe is an Epson compatible 9-pin of standard design, the likes of which we have littered around the office in various places, and all of which work fine with any Amiga. If the printer will not work, either it or your cable is at fault.

As you say you are using an Epson without problems – I assume this is working with the cable you tried the Panasonic with. If that's is the case, we can rule out the cable, and lay the blame at the printer's doorstep.

On the other hand, if you're using another cable with the Epson, try this with the Panasonic. A positive result would indicate that the other cable is duff.

Your printer port may be at fault, of course, but if this is the case you will have to have the Amiga checked out by a reputable repair company.

Confused consumer

I have £200 to spend and I don't know which of three things to do as events are moving so fast in computerland.

1. Buy a 2Mb RAM expansion.
2. Buy the entire 2.04 ROM set and ECS chips.
3. Wait a little longer and buy the new GVP A530 Combo/52Mb hard drive. Does this goodie have room for a maths co-processor?

I have a Kickstart 1.3 A500 (1Mb) with printer and external drive. Can you advise me?

Oh, and something else. I recently bought a PD disk and when I came home and booted the thing up, I placed another disk in DF1 to stop it clicking. It was a rather important disk, being my save game disk.

Anyway, when the PD disk had stopped loading I saw a little CLI screen which said "Saddam checker" and it became active when I asked for a directory on DF1.

Now, because the Amiga read the disk in DF1 the checker found that the disk-validator was in fact the dreaded Saddam virus, and it began to repair the disk to deactivate Saddam. Is this a new checker?

Robert Baas, Ridderkerk, The Netherlands

Without an idea where your main productivity interests lie I would be silly to recommend a specific upgrade option. However, I would definitely not go for the 1.5Mb RAM expansion if you are even remotely interested in a hard drive with a RAM upgrade option.

The GVP A530, though we've not as yet tested one, looks like a good buy. I'd wait until I'd seen the magazine tests if I were you, but if it comes through with flying colours, the A530 represents a superb value for money buy.

The ECS and Kickstart 2.04 upgrade you seem to be considering as an alternative should be looked upon as a "must buy" extra if you are in any way serious about the Amiga.

After only ten minutes using Kickstart and Workbench 2, you won't want to look at another 1.3 screen again, let alone use one.

Oh, and don't worry about the checker as it appears to be doing its job fine.

Dodgy Gazza

I have an A500, Ashcom 1.8Mb RAM expansion, Cumana external drive, and a Citizen 124D printer, and recently suffered a similar problem to that of Mr McLean (issue 50).

I found that whenever a write-enabled disk was inserted in either drive and the disk was initialised or written to, the disk sector header was destroyed. This of course made the disk unusable.

When a disk was initialised, the read/verify counter appeared as normal, but only a few seconds later a message would appear telling me "Initialisation failed. No sector header. Try a different disk".

In my case, the fault was caused by the Gary expansion board connected to the 1.8Mb RAM expansion by a ribbon lead. I returned the unit twice to Ashcom who eventually replaced it and advised me to make sure it was pressed fully into the socket when installed. My Amiga is now formatting and copying disks normally.

If Mr McLean still has problems he might try removing his Gary expansion board, replacing the Gary chip in its socket, then attempting a disk format. If it works, he should replace his Gary expansion board and ensure a tight fit. Hope this helps.

S Copeland, Dumbarton

Thanks for the feedback. You seem to have been lucky in buying your RAM card from a supplier who made an effort to help you out!

If Mr McLean is reading this, give it a try, but I must confess to a certain amount of surprise that a RAM card is affecting disk operations. Maybe someone can write and explain why?

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Office in a box

Ben Styles dons his suit, fires his staff and sharpens his pencil to review Mini Office, the new business suite from Europress Software

How many times have you thought about buying a piece of commercial office software then on seeing the price changed your mind? Probably more times than you care to remember.

The only packages that actually combat this are either shareware or very old packages that are obsolete. But not this one. Five of the most commonly used programs in business and home software on three disks in one package, All you could ever need – or is it?

A database – perhaps the one thing that every company needs – is the first sub-application in the Mini Office suite. Thankfully it's simple to use, which is a relief. So much business software is released with a manual that's too sparse or written in a completely unfriendly style.

The package is quite pleasing to the eye – the designers have adopted a screen format which puts the search icons at the bottom, looking like pseudo-VCR buttons, so you have Play, Fast Forward, and Record to search through and save all your files. It also does all the normal string searches.

Storage

Don't worry about storage space if you have millions of files – you're not likely to run out of processing room because the storage capacity runs on disk space, which is a lot of information even if you're just storing on one floppy.

On the same disk are the floppy utilities, which are very similar to SID, the souped-up shareware file manager. Your screen is split into two so you can load the contents of a floppy or a hard disk into either of the two different cells.

Once the information is up on the screen you can manipulate it in a number of ways. It has all the basic utilities, like a disk formatter and a copying utility between the two information sources.

Painful

Spreadsheets are an awkward thing to use – more often than not they are very inelegant and generally painful. Mini Office's spreadsheet is standard with all the usual pull-down menus, but features like importing Ascii files and crunching binary code, as with K-Spread and other top spreadsheets, are lacking.

Again the programmers have used the VCR buttons for scrolling through the sheet. They're very clear and work well with the program, but looks aren't everything.

As soon as you enter the wordprocessor you'll think you've entered the database again by mistake. The VCR buttons are at the bottom of the screen again but this time they replace scroll bars for text manipulation and shifting from one page to another.

One disappointing aspect of the program it that it doesn't support PostScript printing, which limits capabilities slightly. This also means that the number of fonts you can use are limited to about six or seven of the standard Workbench variety. It does, however, let you import pictures into the text which is a big plus.

All in all, it's a good, standard wordprocessor with the usual utilities, counts, checks and various text bending utilities, so it basically does the job quite well.

Graphical representation of mathematical data is always a handy way of showing people what you're on about without baffling them with streams of numbers. The graphics utility in this package is perfect for doing just that.

Endless

Once you have imported the data from your spreadsheet you can then draw the graph. The option for the graphs are endless – options for positive and negative data and various permutations of the way the information is calculated.

What is really nice is that the different options are displayed as icons and not as huge long names, so you're working on a what you see is what you get basis. The graphs themselves are pretty uninspiring – just normal pie charts and so on.

Printing-wise they're not really up to a good commercial standard, mainly because of the layout which again is pretty uninspiring.

Graphically they're nicely coloured and put together and a good aid for manipulating existing information, but they wouldn't stand up on their own.

All business software manufacturers should think of doing something like this. All the different programs are interactive – numbers you crunch in the spreadsheet can be transferred to the graphics utility and converted into graphs.

In turn, the final graph can be placed into the text in the wordprocessor. As well as working together, all the programs share a similar design which is handy because it helps the user gain familiarity easily.

Indeed, the biggest plus for the package as a whole is its ease of use. Many programs leave you guessing how to use them, and so many have a manual that's been written by an igloo dweller with a speech impediment who's never used a computer.

It's not exactly the ultimate business package because it doesn't have the frills of other individual pieces of software, but it's pretty good for the price. AC



Disk Utilities... similar to SID



No, it's not a VCR, it's a Database

Mini Office is a product of
Europress Software
Address: Europress Software, Triton House, Adlington Park, Macclesfield SK10 4NP
Tel: 051-357 2961
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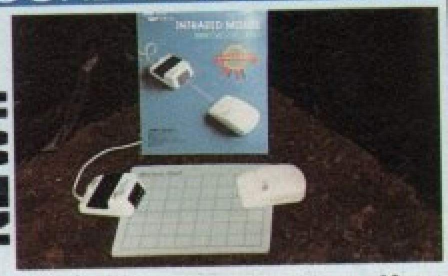


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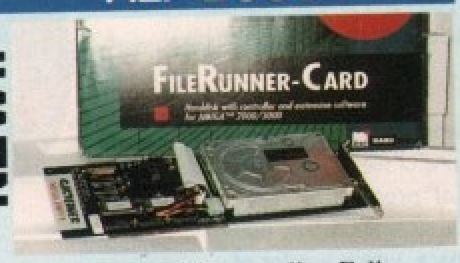


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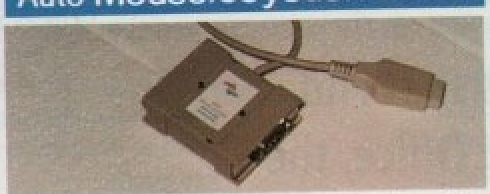


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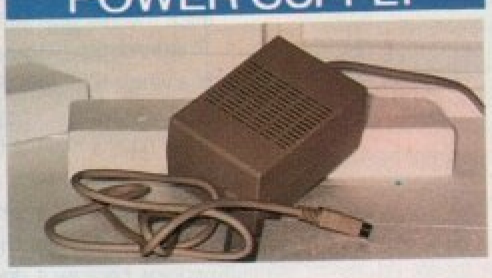
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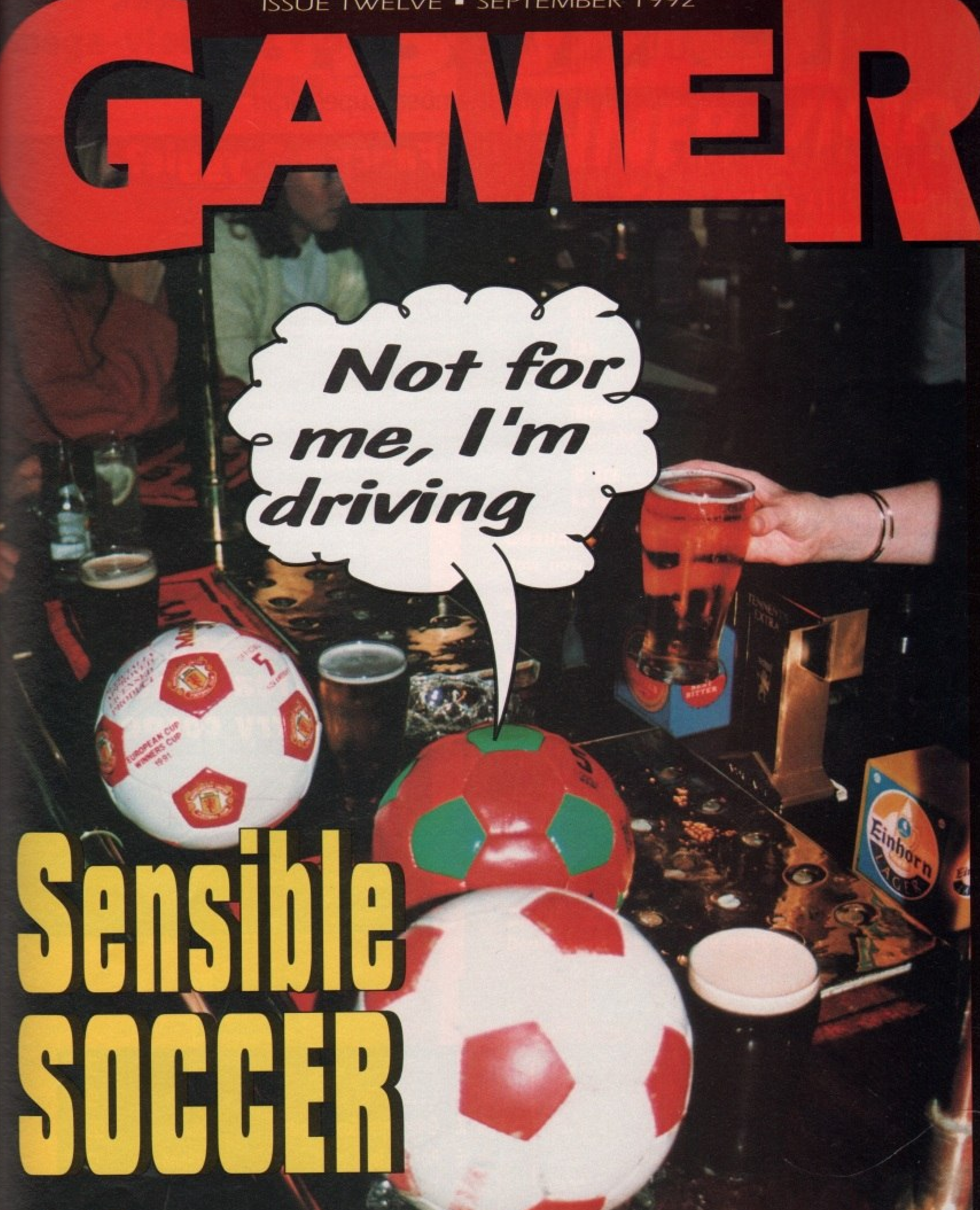
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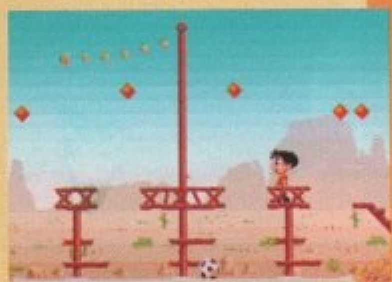
The games section that remembers Super Gran

Remember Sport Billy?

Well he's back! Sort of. Following up from this month's rather soccer-mungous Graham Taylor's Soccer Challenge, Krisalis have got a reet promising little platformer up their sleeves.

It's called Football Kid, and it looks stonking. It's a platformer with a difference. Our hero has to get his football across the level, by making use of all manner of footy skills. Boot it over firey pits, head it over quicksand, all the time making sure you collect the icons laying around.

We've seen an early demo, without any baddies in it, and we've been playing it to death. It could well be the twist that's needed to give the platform genre a firm kick in the bum. More news as and when we get it.



Football Kid: There he goes, there he goes there he goes

Fancy a Psyggie?

Those gorgeous fluffy bunnies up at Psygnosis' Liverpool headquarters have got a veritable explosion of games thundering towards the software shelves in Boots (and most other shops as well).

There's Cytron, all about a spooky robot that can split into two separate units, in which rescuing some dozy scientists from an overrun complex is the order of the day.

Then there's Tomatoes, in which you take Terry Tomato to the top of a magic vine in order to save your girlfriend, Tracy Tomato from the fiendish Squirrel Sam. It also features trampolines and flying pigs. Oh dear. Must be something in the water up in Liverpool.

On the sequel front, they've got two follow-ups to two of their most famous games. The fruity and rather frisky hero of Beast 2 is back in the not-so-confusingly titled Beast 3, once again preparing to duff up the spooky Beast Lord, and anyone else who gets in his way.

And also hovering darkly in the skies and dropping massive amounts of explosive devices on the unsuspecting people below is Armour-Geddon 2.

One of the Gamer faves of last year, this 3D arcadey simulator thing will feature "textured blitter fill, circle, transparency effects and ellipses". Well, thank goodness for that. I don't know where I'd be without textured blitter fills every morning. Should be good anyway.

All the games cost £25.99 and should be out around September or October. Luvverly.

Armour Geddon and Beast 2. The sequels might look like this. Probably





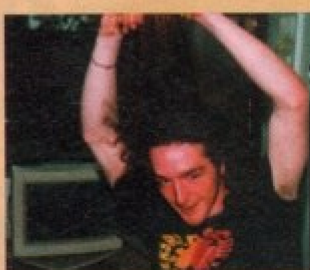
Now we are one

Yup! It's our first birthday! Twelve issues old, and feeling twice that age. And as we ring in the new age, we wave goodbye to some old chums, and welcome some new blood on board.

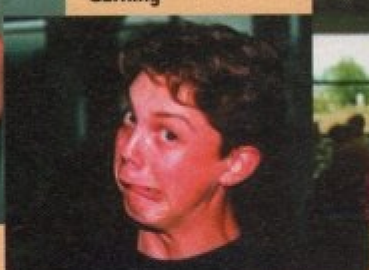
So, it's a tearful farewell to the omnipresent Biffa as he skips daintily over to work on Mega Mania, our new Mega Drive magazine. Biff brought many a smile to the nation's faces, and cluttered up the mag with that horrendously distorted picture of his. Cheerio, old boy.

But weep ye not! For leaping in to save the day comes Ben Styles. Filling Biffa's rather cheesy shoes for a limited time only, Ben has taken over the reviews that Biff left unwritten when he was spirited away.

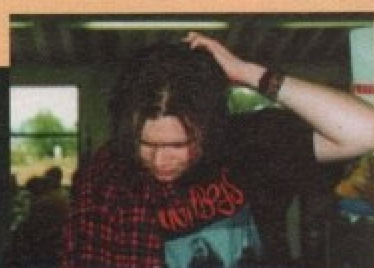
And all this while maintaining his secret identity as Mr October in Playgirl, and topping the charts with his top pop combo, Mr Benn. How does he do it? (Robot clones, that's how.)



Ben the Hairy Man: "Oh dear"



Jonathan the Biff: "Gurning"



Daniel the Editor: "Confused"

The really, really sorry corner

Yeh, sorry. It seems that a couple of mistakes crept into last month's ish.

The price we gave you for Virgin's Shuttle was a tad wrong. Instead of reading £44.99, it should have read £35.99. But, hey, what's nine quid? Well, it's about nine quid really, but you know what I mean? Sorry again.

Also, in the Addams Family review, the headline "Not as good as The Munsters" should, of course, have read :"Hot Ascot for funsters".

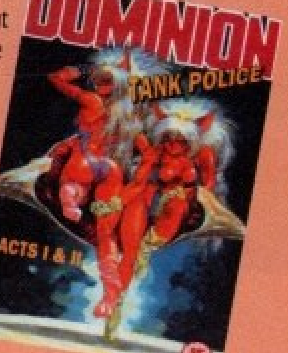
We also apologise for the totally unwarranted use of the phrase "University Challenge" in the Jaguar XJ220 review. Sorry for any distress caused. It won't happen again.

talking shop

ELSPA PENGUIN CHARTS

This month		Last month	Title	Publisher	Price
1	▲	NE	Sensible Soccer	Renegade	£25.99
2	▲	20	Striker	Rage Software	£25.99
3	▼	2	Monkey Island 2	US Gold	£37.99
4	▲	NE	Fire And Ice	Renegade	£25.99
5	▲	NE	Lure of the Temptress	Virgin	£30.99
6	▲	11	Rainbow Islands	Hit Squad	£7.99
7	▲	13	First Division Manager	Code Masters	£7.99
8	▲	14	Formula 1 Grand Prix	Microprose	£29.99
9	▼	1	Epic	Ocean	£29.99
10	▲	NE	Championship Manager	Domark	£24.99
11	▲	12	James Pond	GHB	£7.99
12	▲	13	F16 Combat Pilot	Action 16	£9.99
13	▲	NE	Graham Taylor's Soccer Challenge	Krisalis	£25.99
14	▲	NE	Pro Tennis Tour	Hit Squad	£7.99
15	▲	NE	The Addams Family	Ocean	£25.99
16	▼	4	Jaguar XJ220	Core Design	£25.99
17	▼	9	Eye of the Beholder 2	US Gold	£35.99
18	▲	19	Scooby Doo and Scrappy Doo	Hitec Software	£7.99
19	▲	NE	European Football Championship	Domark	£25.99
20	▲	NE	Dune	Virgin	£30.99

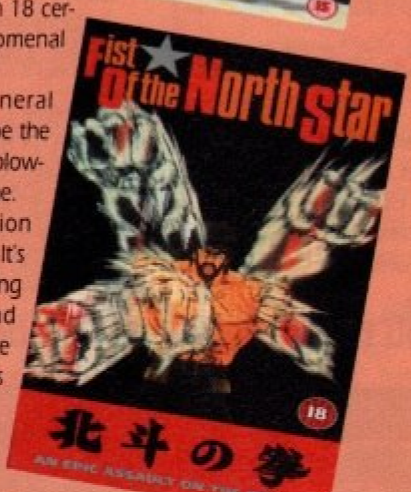
Japanese mega-violence video extravaganza



OK, so it's not strictly connected with computer games, but here's a bit of news about some new videos you might very well be interested in.

They're from Manga Video, and showcase the best of Japanese animation. If you've seen the storming epic Akira, then you'll know what to expect. Post apocalypse futures, mutants, biker gangs and gallons and gallons of blood.

Fist of the North Star has been out for a while, but is definitely worth a look. A bit Mad Max in style, with an 18 certificate because of the phenomenal amount of blood spilling.



Exploding heads and general squishing of bodies seems to be the crux of the plot, but it's mind-blowing stuff. In more ways than one.

And more recently, Dominion Tank Police has hit the shelves. It's a bit more light-hearted, earning a meagre 15 certificate, and nobody really dies in it. There are just loads of tank chases and massive explosions.

There's a bit of bad language, and loads of double entendres, but nothing you wouldn't see on early evening TV, really. A very silly sci-fi comedy about foxy criminals stealing urine samples. Hmm.

Both tapes retail at a nippontastic £12.99, and should be available from all good video shops. Bonsai.

How To Make An Attractive Sounding Game Pt 1

Don't call it "Ugh!" for a start. Not the most seductive of titles really. But someone's done it. And that someone is Soundware.

Ugh, it would seem, is a prehistoric taxi driver. A sort of stone age Robert DeNiro. He's invented a very primitive helicopter, and uses it to ferry his chums from one platform to another.

Sounds a bit dull, eh? But! (but! but!) there are dinosaurs and other suitably ancient foes to avoid. Oh, and crushing your passengers is a no-no as well.

Deceptively simple looking, but quite addictive really. Full review in the very next ishoo.



Ugh!: You talkin' to me?

THE CREAM MEAT

haddock slapping - richard "rumbaba" williams
sherpa tensing - daniel "mountain goat" whitehead
out of here - jonathan "gone" maddock
ceramic hob - ben "wafer" styles
cat napping - phil "gasoline" morse
arty blokes - terry "scott" thiele
tym "virgil" lecky
alan "brains" jones
ad sales - jane conway
0625 878888

you don't really think you'll win, do you?

it's okay to eat fish, 'cos they don't have any feelings... or so they say

climax

next month: several raisins crush Michael Aspel with a very sturdy Tonka toy

GAMER

INNER VISION

Come out, come out wherever you are...

REVIEWS

REGULARS

Come on have a go if you think you're hard enough...



RENEGADE ▪ £25.99 ▪ 1/2 meg ▪ Joystick ▪ Out now

Yes indeedy, fight night is on. The champion in the blue corner weighing in at 225 pounds, is Kick Off 2. The challenger in the red corner weighing in at 230 pounds, is Sensible "Sock it to 'em" Soccer. Seconds away, round one!

Kick Off is so popular that it's played in our office by older members of staff every lunchtime without fail. What can you say about Kick Off 2 that won't take up five pages of space? A game that revolutionised football games forever. Converted to almost every format in some shape or form. Everyone I know owns a copy. And now from out of the darkness, a challenger.

Sensible Soccer has recieved rave reviews throughout the computer world and to be honest it was all down to one thing – bad old-fashioned hype.

The current darling of the computer press is, not surprisingly, speeding up the charts faster than Linford Christie. But let's calm down here and go back a few months. Let me now introduce Wayne Campbell, diddle liddle dee diddle liddle dee, thanks Wayne.

I first had a go of a demo of Sensible Soccer a few months back. Thanks to the hype I was like a man possessed, ripping open the envelope and slapping the disk in the drive with such ferocity that I could've broken the computer.

Sitting there expectantly waiting for Sensible Soccer, spit now foaming at the mouth, sweating nervously, waiting, just waiting... Oh no I'm so excited I've forgotten to turn the damn computer on. Right so I turn the computer on and again I sit there waiting.

Aha, it's loaded, at last. I played the demo. My expectations were crushed. Disappointment flooded every bone in my body. Could I control my little men? No, I could not. I now know the reason why – it was all those years playing Kick Off that did the damage. So far Sensible Soccer had not lived up to the hype. Soon all that was about to change.

Sensible Soccer had arrived in the post and because of that earlier disappointment I was a little bit nervous. Rather reluctantly, I carefully placed it in the drive and... diddle liddle dee diddle liddle dee. It was all a dream...or was it? Nay, it was no dream! There shining brightly in front of my eyes was Sensible Soccer. Wow look at all these options. What shall I do first. Hmm, European Championships – now there's a novelty.

I decided to be England and see if I could do better than Bore'em Taylor. First match was versus Denmark and I thrashed them 5-0, easy. Well, no it isn't – I lied. The result was actually the other way round.

Due to that damn Kick Off 2 I wasn't in tune with my joystick. I had to take quick action, I didn't want to lose any more matches, so I chose the friendly option instead.

To make it fair I chose Germany and I decided the computer could be the greatest international side ever, San Marino. Now is that fair or what? Unfortunately I still lost, but I was getting better I only lost 7-3 this time and scored three cracking goals.

Next friendly please, I'll be Holland and the computer can be, err, Albania. The next sentence you can sing with all your might at the top of your voice just for added realism and atmosphere.

"Three - Two, Threeee - Twoooo, Threeeee - Twwooooo". Hopefully there will be a lot of people staring at you right now. Yes, I won, I won the game. Hurrah.

Let's re-live that last goal again Brian. If you're reading out loud then I recommend that you adopt a John Motson voice at this next point. "Ohh bad ball from Abazi and Koeman's intercepted it. Lovely ball from Koeman to Berkamp. Mistake from the defender. The cross is good and there's Van Basten. Van Basten dummies. Guillt with the shot. Goal! Holland three, Albania two."

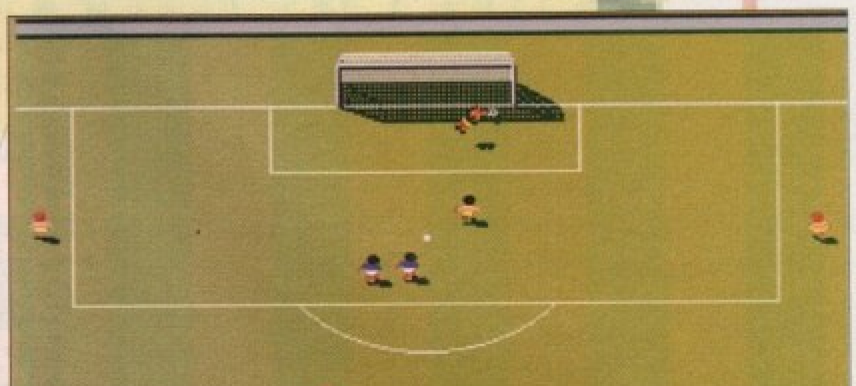
Six friendlies later and I've completely mastered the control system. I can now sweep out of defence into attack with an uncanny smoothness that you wouldn't quite believe. It's like watching Liverpool on a good day.

Before I go into detail about the actual match, I'll run through some of the options with you, because that's the sort of informative chap I am.

Time is first on the agenda. The match length can be from a quick three minutes to



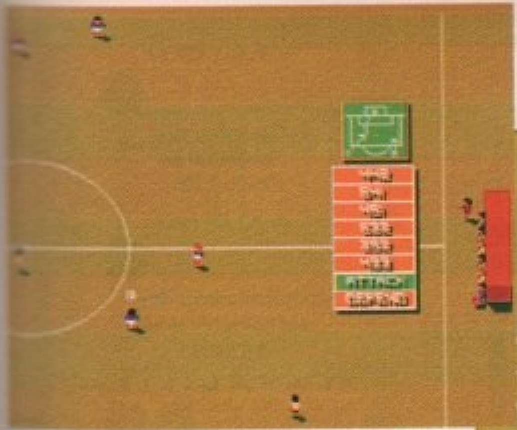
The England team has bee[n] chosen, so no[w] in true Graha[m] Taylor traditi[on] I have to thro[w] away the gam[e]



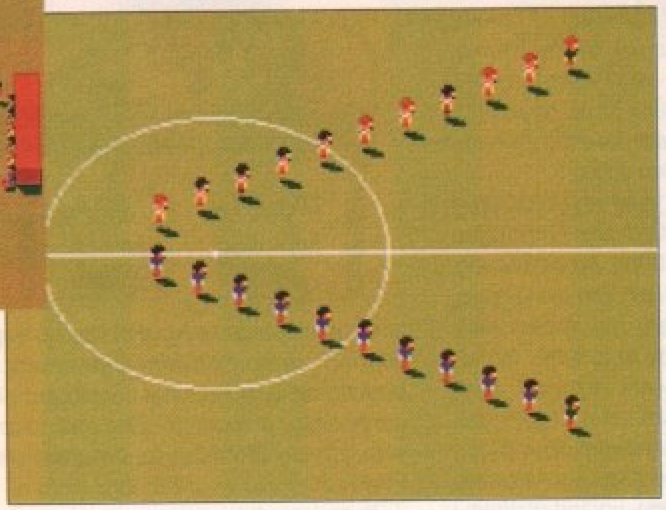
What a save! The green-shirted goalie flew through the air with the greatest of ease



It's a replay – time for Dessie, Terry and Jimmy to discuss football, life, the universe and everything



There's Graham Taylor, he's probably going to try to win the game by taking off his star striker. Tutt tutt.



The teams are all lined – up now all we need are some yobs to hurl abuse at the players, the manager, the referee and each other



Now that's what I call style. Jeff Banks eat your heart out

a lengthy ten. Choosing Auto Replays will... come on, you can guess, can't you?

Seasonal weather will let you choose which month you want to play in and depending on which month you choose the pitch changes accordingly.

For instance, if you pick June you will get a lovely cut pitch whereas if you pick December you will get an icy pitch.

If you turn off the seasonal weather then you can just simply pick which pitch you want, normal, dry, hard, icy, muddy, wet and soft pitches are there for you to choose, or if you want to be daring you can select the random option and the computer will choose one for you throwing up that element of surprise and intrigue.

As well all the International football teams, you can also load up all the club teams. You can then have great line-ups such as Fram Reykjavik against Hajduk Split or other not so well known teams such as Barcelona against Juventus.

If a particular team isn't there you can make up your own. Everything is fully changeable – the players and managers' names, the players skin colour and, of course, you can change the team kit.

Whether you just want to play in all black to confuse the ref or you want to play in a combination of pink and yellow and put off the opposition, the choice is yours. Well I'm running out of words, but there are literally hundreds of options, far too many to detail here.

As you can see from the screenshots, Sensible Soccer is viewed from a slightly elevated position. This is great because there's no need for a radar or scanner – you can practically see what's going on all over the pitch.

Now every football match needs a bit of atmosphere and Sensible Soccer is full of it. You can hear crowd chants along with samples of sirens and drums for that international feel.

If you hit the post the crowd gasps, if you foul someone they boo and if you score they wet themselves. Baby Kid the baby that...SLAP! Sorry I went a bit funny there for a minute.

Well there's the full time whistle and here's the after match comments:

"Well at the end of day the Brian, football's the winner, a great contest and no mistake. Sensible Soccer has got great playability, but so has Kick Off 2. Sensible Soccer is very addictive indeed, but then again so is Kick Off 2.

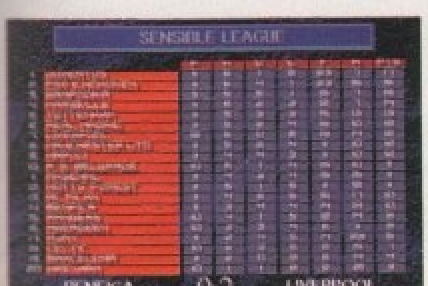
"Sensible Soccer has just got the edge in graphics and sound, but does a football game really need brilliant graphics and sound? Take a look at Kick Off 2 as an example. I'm not going to say which game is best, but I will give you some advice.

"If you hated Kick Off 2 and couldn't get to grips with it then Sensible Soccer could well be the game for you. If you've already got Kick Off 2 and you're a footy fan then Sensible Soccer is the ideal complement to it, but whatever you do, don't leave Kick Off 2 altogether and don't forget there will be a rematch because Kick Off 3 is on its way." Gulp!

Jonathan



Where's Stuart Pearce when you need him?



Red Devils make your wildest dreams come true and make Man Utd win the league



Penalty shoot out! The pressure's on, but can you take it?



VISION

GGGGG

Lovely detailed little sprites. Kick Off meets Mega-Lo-Mania.

AUDIO

GGGGG

Brilliant samples. There's more atmosphere than the FA Cup Final.

PLAYABILITY

GGGGG

Once the control system is mastered, it's a dream to play.

ADDICTION

GGGGG

You'll be very addicted, but keep Kick Off 2 handy somewhere.

92%

Boys and girls, the ballad of...

DOJO DAN

EUROPRESS • £25.99 • 1/2 meg • Joystick • Out now



Good grief. The heartless blighter even beats up squirrels. String 'im up

Dojo Dan – the story so far (or How To Almost Make It In A Platform Game). Born in Wolverhampton, young Dojo Dan was a problem child from the beginning.

Possessed by a disturbing desire to leap onto any raised surface and hit anything that came close to him, he became the first child to be expelled from nursery school for a combined acrobatics and grievous bodily harm offence.

With his parents at a loss, the authorities took him into care to decide what to do with him. A careers officer looked over his case file and immediately found the perfect occupation for wee Dojo.

He would be the star of a platform game. Simple. He had all the qualifications. His name, for a start. Alliteration, you see. Plus! A talent for martial arts. Plus! Plus! His alarming "raised surface" antics. He was a natural. They packed his things and sent him off to Softwareland.

But things weren't quite as rosy as they'd thought. Dojo arrived, alone and penniless, hoping to find himself a nice starring role in a big, popular platform game, and maybe a couple of sequels.

What he didn't plan on was the three thousand other hopeful computer characters all trying to do the same. Months went by, and no starring role for Dojo. He almost managed to get a non–speaking part for a fairly big budget production of Last Ninja 2, but the role was snatched by some ponce in b l a c k jim-jams.

Dojo started drinking. Whole days would pass by through motel windows in a haze of Jack Daniels. Dojo was on the skids. He watched his rivals scale the heady heights of Softwareland.

That stupid little plumber found a place in the fledgling console sector, and a cheeky young upstart calling himself RoboCod – a false name, I'll warrant – was gaining friends and awards left, right and centre. They were hard times.



Dojo slowly came to his senses. He enrolled in the Miner Willy Detox Clinic and came out a reformed sprite. He also gained a slightly more realistic approach to his work.

Rather than busting a gut for that elusive big, extravagant licensed platform game, he decided to settle for a slightly more modest debut.

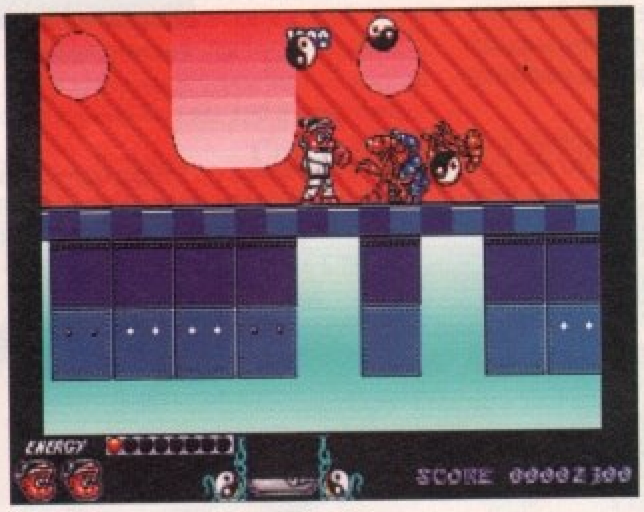
And so, Dojo Dan – The Computer Game came into being. An unassuming little role that didn't make a very big impact due largely to its rather formulaic appearance and lack of overall style. However, rather than returning to the booze, Dojo took the comments in his stride.

It was said that the game was a rather uneven mix of beat–'em–up and platform. While this may have been a bonus, it didn't really add all that much to an otherwise by–the–numbers platform game.

There was also criticism for the way that all too often the game required Dojo to leap off-screen, without knowing if there was a platform beneath him. This contributed an unnecessary amount of blind luck to an already overly difficult game, said many critics.



There was also concern at the lack of a password system, and the odd idea of saving the game to disk at the end of each section. Mind you, it did receive praise for the rather nice graphics, with Dojo himself being described as "a bit of a cutey".



"What do you mean, not as good as the Addams Family? Take that, alien scum!"

Many also enjoyed the vast number of levels, and the ability to decide which order you play the levels in each world.

The soundtrack also received praise, and would later appear as a cover version on Elton John's 700th album, entitled "A Hair Raising Musical Extravaganza". Possibly. Ultimately though, Dojo's debut performance gained only a minor audience. It was put in the shade by the simultaneous arrival of The Addams Family and Fire and Ice, and the promise of Zool in the future.

A shame, but then Softwareland is a harsh place, and the average often get left behind by the trailblazers. An all-too-common tale, and no mistake. Take heed, boys and girls, take heed.

Danie

VISION

Cute sprites, nice backgrounds and plenty of variety.

AUDIO

Optional oriental ditty, and little karate shouts and thumps.

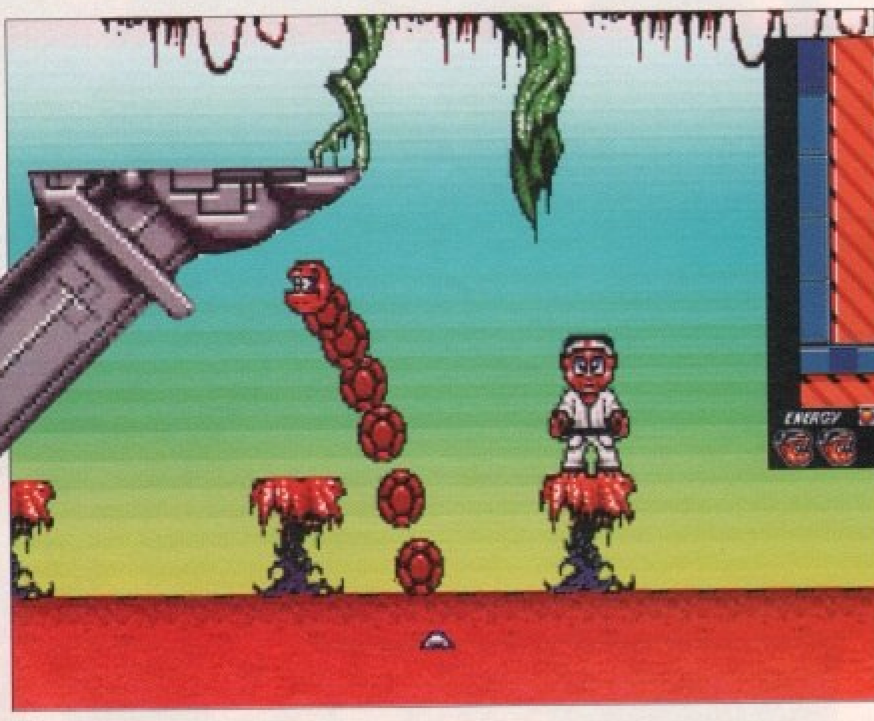
PLAYABILITY

Progress relies on too much luck and not enough skill.

ADDICTION

Overshadowed by bigger, better games at the same price.

68%



Can you jump off-screen and land on a platform? Leap before you look, I'm afraid



Mighty lethal oriental athletes foot

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Daniel

FIRE and ICE

RENEGADE ▪ £25.99 ▪ ½ meg ▪ Joystick ▪ Out now

So come on, what is it with the programmers this month? They've all been smoking those nice cigarettes that the man in the big long coat gives them.

The story lines to all the games seem to have gone completely haywire. Fire and Ice looks like a normal platform affair to your poor unsuspecting game reviewer, but look in the manual and like wow man, it's all talk of intergalactic monsters that have been incarcerated for 2,000 years for blowing up solar systems. Freaky man.



Deep fried Coyote, anyone?

In short, your funksome coyote has been chosen to search out and kill Glemm, the monster who has escaped from his prison of 2,000 years. You must travel from your home, the polar ice cap to the beastie's home and do him over.

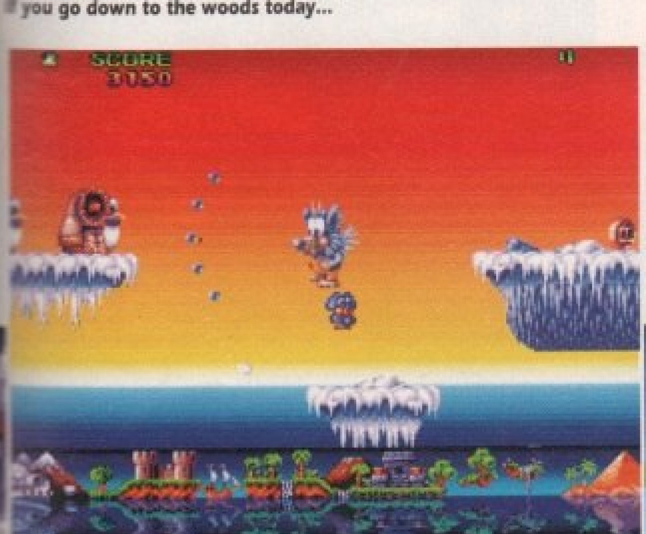
No problem, but that the presence of the big nasty man is corrupting the minds of all the poor creatures on the planet so they all want to beat you up. A pretty poor excuse if you ask me.



If you go down to the woods today...

To be truthful, they gave this game to the wrong person to review because as a rule I hate platform games. But no, I took instantly to Fire and Ice because of the nice touches and the large characters.

I am sick to death of games with characters so small you can hardly differentiate between them and the large bogie that I left on my screen for consumption later.



Eat ice cube, Eskimo death merchant

Old Cool Coyote himself is brilliantly drawn, but for some bizarre reason he's got wings. Each to his own, I suppose.

To help Coyote on his mission he has puppies following him around. With these puppies being mere whippersnappers, they are a bit slow, but they do have their advantages.



Must be a bugger for the postman

They shoot at the same time Coyote does, so you can kill double the number of nasties, and when jumping from level to level if the puppy is with you, you gain an extra life.

To get from level to level you must kill the nasties and grab the bits that come out. These bits are parts of a key. When you've got all the key, find the keyhole and jump through.

At various points in the game there are level skippers so you don't have to do the whole section, but you still have to find them which isn't easy.

Killing nasties is quite easy – just freeze them with you ice pellets and jump on them so they shatter. Probably the biggest flaw in the game is the difficulty of the levels.

Trying to complete all of the levels with only three lives is as impossible as trying to unlace your 20-hole docs after drinking ten pints. It is without doubt a very hard game, but you can but try.



Fire and Ice is well put together, but slightly behind its time. No fresh ideas are explored in the game so it loses its appeal very quickly.

Ben

VISION GGGG
Graphically sound but short of frills that add quality to the game.

AUDIO GGG
Sadly lacking in sound effects but some nice music here and there.

PLAYABILITY GGGG
Very difficult to complete with just three lives and no continue option.

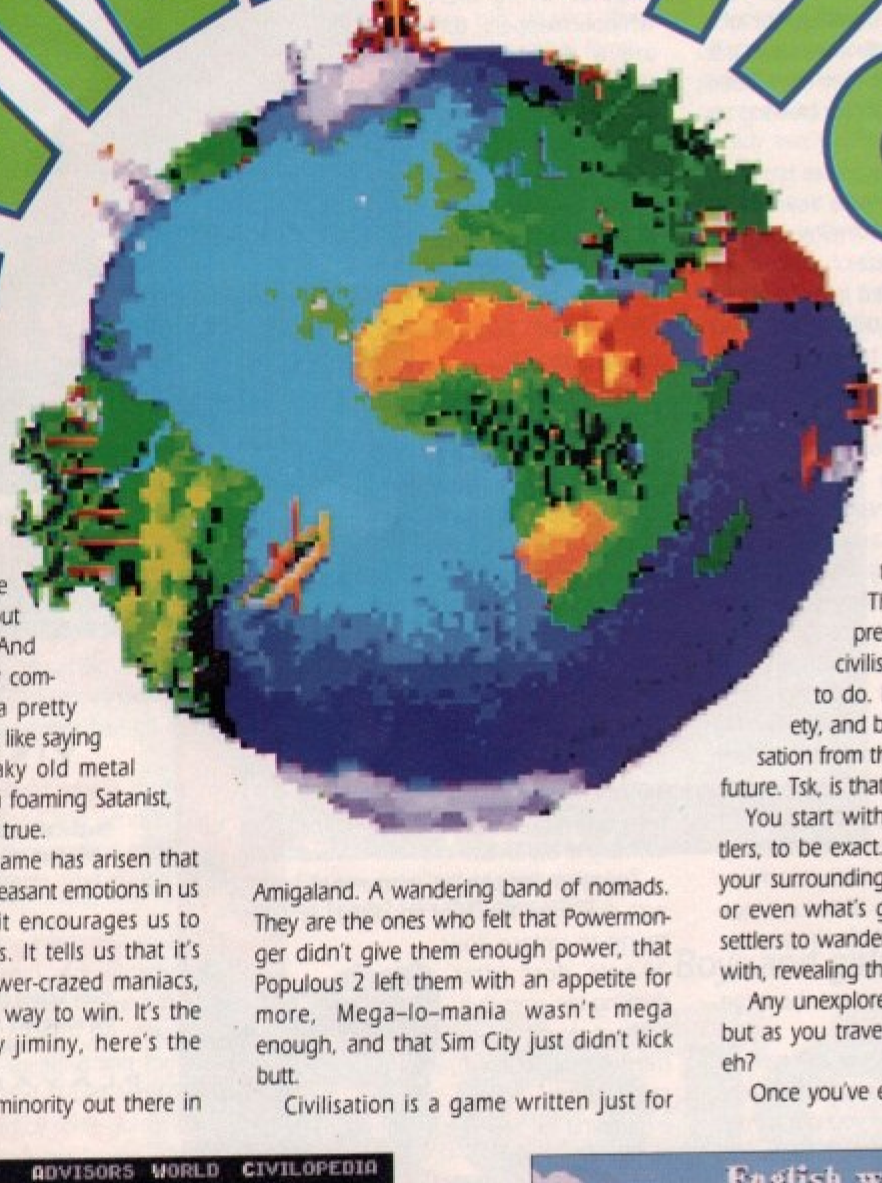
ADDICTION GGGG
Nothing new but a definite "ohh just another go!" game.

86%

Keep up with the Jones'... global style!

MICROPROSE
£34.99 ▪ 1 meg
Mouse/keyboard
Out now

CIVILISATION



There are some sick people out there, kids. And it's all the fault of your computer. I know that's a pretty stupid thing to say, just like saying that listening to creaky old metal bands turns you into a foaming Satanist, but I reckon it could be true.

A certain type of game has arisen that stirs up some very unpleasant emotions in us human beings, and it encourages us to indulge these feelings. It tells us that it's right to be cruel, power-crazed maniacs, and that it's the only way to win. It's the "God game", and by jiminy, here's the biggest so far.

There are a small minority out there in Amigaland. A wandering band of nomads. They are the ones who felt that Powermonger didn't give them enough power, that Populous 2 left them with an appetite for more, Mega-lo-mania wasn't mega enough, and that Sim City just didn't kick butt.

Civilisation is a game written just for them. Sickos that they are.

The scope of this game is pretty uncanny. Just create a civilisation. That's all you have to do. Build towns, develop society, and basically advance your civilisation from the Stone Age right into the future. Tsk, is that all?

You start with just one unit. Some settlers, to be exact. You know nothing about your surroundings, your fellow civilisations, or even what's going to happen. Use the settlers to wander around the map to begin with, revealing the landscape as they go.

Any unexplored land is shown as black, but as you traverse it reveals itself. Clever, eh?

Once you've explored as far as you can, tell the settlers to, well, settle and they'll found your very first city. Name the city, and then you can get on with building stuff. Military units perhaps, or if you fancy a peaceful existence, start to build the essentials for a comfortable existence.

To begin with, things'll be pretty basic, but by instructing your scholars to work on certain skills, you can advance as a civilisation.

For instance, if they discover bronze working, you start to build better weapons, if they discover navigation you can build ships to explore the rest of the planet.

On the other hand, you can work on the social aspects, by developing different ways of thinking – communism, the republic, monarchy and so on – and learning how to build libraries and universities.

Help your cities thrive and grow, keep ahead of your neighbours by constantly developing new sciences, and most of all surround your towns with plenty of hefty military units.

You see, you're certainly not alone in this game. There are the other civilisations for a start. Before you begin playing, you can set how many others there'll be, but if one civilisation gets wiped out then another rises in its place.

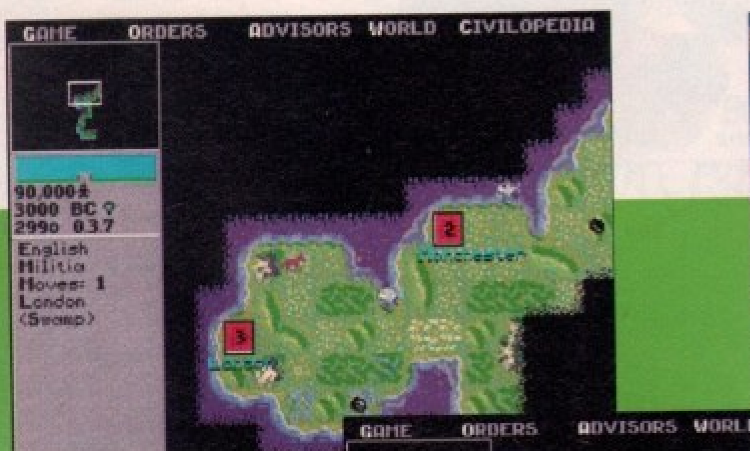
That way, there'll always be the set number of civilisations. Thanks a bunch. And on top of all that, you'll probably have run-ins with barbarians.

They tend to be a bit hard, but unlike you they can't develop new weapons as quickly or found cities. So you can soon kick their hairy heads in.

Make friends with other leaders, declare war on others, exchange or steal ideas, build a bigger and better civilisation until the game ends.

This happens in one of three instances. Your civilisation being crushed is the most obvious (and the most frequent), or maybe you could crush all the others (highly unlikely and very violent).

The third way to end the game is the most intriguing and one that shows you just how much depth civilisation has. The first civilisation to master space travel and to reach Alpha Centauri is automatically

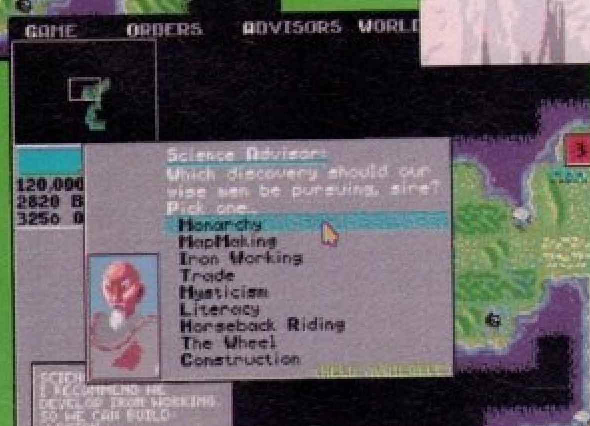


See if any geography fans out there can spot the deliberate mistake here...



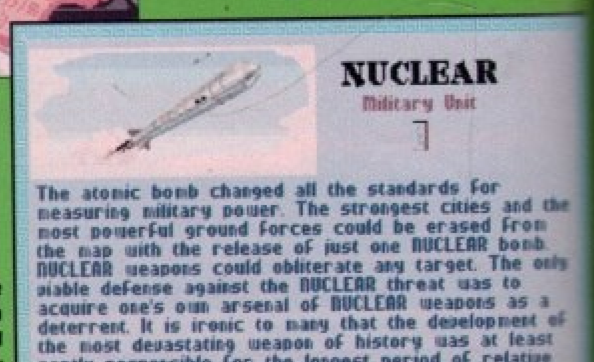
Took their time about it, though...



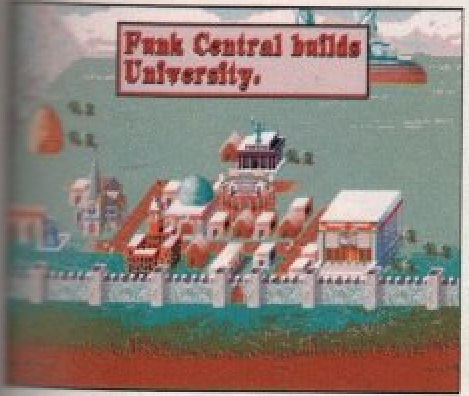


Right then, invent some tinned macaroni cheese that doesn't smell of sick





The Civilopedia contains all sorts of handy info, and it's educational too!



Funk Central, the only city to have its own industrial-strength beehive



My biggest and best city, Macc (ahem)



Football hooligans at three o'clock!

declared the supreme Big Cheese. Space travel? Yes! Apparently, if you can get your civilisation brainy enough you can conquer the stars. Yowsers.

So that, in a very edited form, is the idea behind the game. But, I hear you cry, "What's it like to play, Uncle Daniel?". It's very good indeed.

Admittedly, it looks crap and there's no animation to speak of, and it is pretty slow moving to start with, and there's a hell of a lot of information to digest. But once you start playing, I guarantee you'll be hooked. The game's been cleverly designed, so it's almost impossible to turn it off.

All the time, there's something in the pipeline, so you start telling yourself "I'll turn it off when I've developed Alphabet" and then it's "Ooh, I'll just wait until I've finished this boat" and then "I'll just have a look around this island" and, well you get the idea.

In fact, you're lucky to be reading this review at all. Every time I started playing I ended up, losing half a day to the flippin' thing. It's addictive. Dangerously addictive, in fact.

It's not helped by the fact that the game looks really dull. "1985 strategy game" is what the graphics bellow. If any of your mates see you playing this they'll think you've cracked up. Only when they decide to have a go themselves will they see the folly of their ways.

I'm a sucker for games that let you do whatever you feel like doing. And that's why Civilisation is currently occupying my every waking hour.

Ever wondered what would happen if America was a Communist state? Or if England was invaded by Zulus? Or if the Chinese invented nuclear weapons in the Middle Ages?

Well, this game let's you find out. It's a bit like Mega–lo–mania meets Sim City, via Populous Avenue.

The PC version wangled loads of awards last year, and quite rightly so. I hesitate to wander so far into the realms of cliché, but every game of Civilisation I've played has been completely different.

The only downers are the over-long intro that can't be skipped, and the spooky way that you can't move from one space adjacent to an enemy city to another adjacent space.

Still, an essential purchase for any self-respecting fan of strategy games. More depth than Oliver Reed's wine cellar.

Daniel

VISION

Crap icons, OKish still screens. Sacrificed for better things.

AUDIO

Each civilisation has its own theme tune, and there are a few FX as well.

PLAYABILITY

Tricky to get into at first, but patience maketh the game.

ADDICTION

Yeh, just a little bit addictive. Now sod off while I have another go.

93%

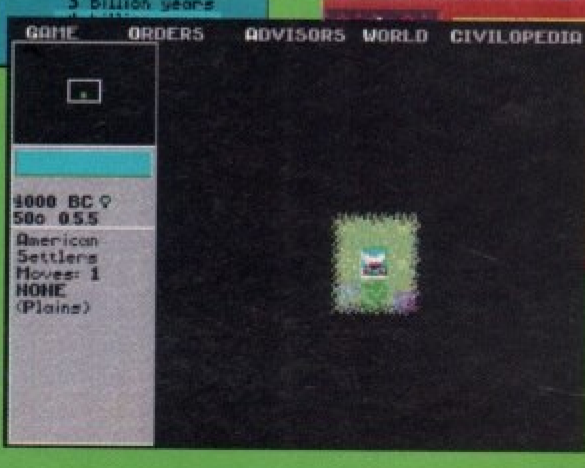
GAMER GOLD



Just a little more off the peninsula sir?



Zulus. Fawsands of 'em. Don't shoot till yer see the whites of their eyes, lads. Not a lot of people know that, etc



OK, it's a bit of a dull start but from little acorns...



Here's the control screen for my thriving metropolis, Funk Central



Oh no, not more platforms. I'm sick of platforms. In fact I will be more than content if I never see another platform again as long as I live. I wonder how many platform games there are in the world of Amigadom? Hundreds, no probably more like thousands.

Anyway, luckily for you punter and unluckily for me the writer, here is Risky Woods by Electronic Arts. Right, hold everything! Risky Woods? What kind of a name is that for a platform romparama?

I suppose it's because somewhere in the game there will be a risky wood. What's so bloody risky about a wood anyway? I can see it all now.

Some kid runs to his mother and cries: "Oh mother, a branch in the woods has scraped my arm and now it's bleeding!"

"Never mind dear I'll get some antiseptic, but you shouldn't be playing in those woods – it's far too risky!"

Yeah right, very risky indeed, unless Draxos and his evil legions show up and fill the wood with evil rotting corpses. In some uncanny way I have just introduced you to the big bad and very ugly Draxos – the very reason why the woods are risky!

It's about now that a deadly handsome and highly intelligent hero with muscles his muscles turns up. Oh look, here comes someone now. Readers meet Rohan, the young warrior.

Barely out of nappies, our hero has arrived to deliver death and justice to the evil hordes that inhabit the woods, thus making them far less risky.

Draxos, being the evil guy that he is, has turned all the monks that roamed the woods into statues. Now these monks guarded the Wisdom of the Lost Land. If Draxos were ever to get this wisdom, all would be lost.

So as well as delivering death and justice, Rohan has to set all the monks free. A bit of tough task, eh?

To be honest, this is your bog standard platform game. Nothing new has been incorporated to separate it from the rest. So don't expect any surprises.

The control system is easier than something that is quite easy indeed. Left for left, fire for firing weapons, so on and so forth.

If you care to take a gander at the screenshots that grace this very page, you will notice the graphics. Corr, phhwworrr, eh what a beauty. The graphics are amazing, talk about console feel or what!

In fact you could be easily mistaken and think that you are actually playing on a console. If all graphics were like these then I'd be a very happy man. Soundwise, there is a delightful little atmospheric kinda tune, bu you won't be dancing in the clubs to it. Th game's has few sound effects, except for few grunts.

It's very playable, but it is not for the inex perienced platformer because it is very har indeed. In fact the experienced platforme might have troubles with this one.

So, apart from the hardness of it all, wha else is there that troubles you while playin it? Well, it's hard to say, but there's som thing about Risky Woods that I didn't like. think it's because it's so similar to every othe platform game.

All you do is move left to right, killin beasties and rescuing monks – there doesn seem to be a lot of gameplay in there.

It's not different enough to earn itself on of those fabled Gamer Gold awards, bu nonetheless if you're a platform fan an looking for a challenge then Risky Woods for you.

Jonathan

If you go down to the woods today...

RISKY WOODS

ELECTRONIC ARTS ▪ £25.99 ▪ ½ meg ▪ Joystick ▪ Out now

VISION
Amazing, brilliant, wonderful and downright fantastic.

AUDIO
Moody little tune with small amount of sound FX in game.

PLAYABILITY
Doesn't seem to be much gameplay, plus it's far too hard.

ADDICTION
Fairly addictive, but difficulty will put most gamers off.

80%



Not only does Rohan have to deal with arrogant beasties, but he is also made to watch Bob's Your Uncle



Arrghh, it's one of those, errr... excuse me, just what exactly are you?

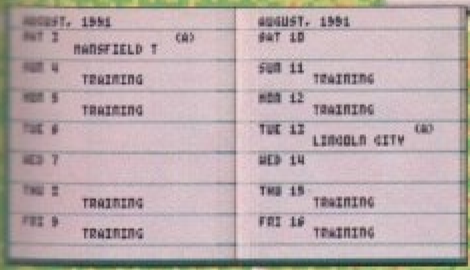


Blimey, that's a first class impression of Indiana Jones

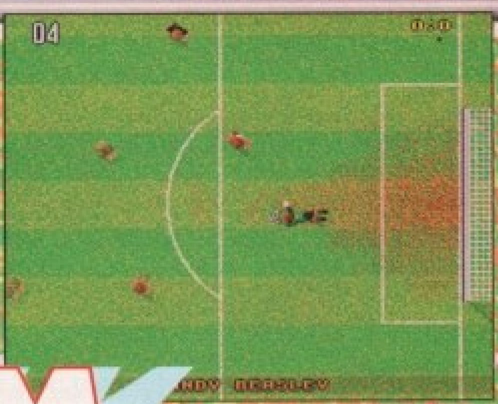




No, you can't have the Golden Fleece, it's mine. Whoops, see what happens when you see Jason and the Argonauts too many times?



My manager's diary. Don't let me forget my date with Dickie Davies. I'd hate to let him down...



I knew I shouldn't have hired that body-popping goalie



Yes! It's a hate-'em-up!

GRAHAM TAYLOR'S SOCCER CHALLENGE

KRISALIS • £25.99 • 1/2 meg • Mouse • Out now


BLACKPOOL EVENING GAZETTE . SATURDAY . 3RD AUGUST 1991

Gazette Sport

ALLON IMPRESSES TAYLOR.

Seasiders hit by Stags.

Wilmot retires after injury

Well ooo-err, eh kids?

What a plonker. What an absolute gimp. Graham Taylor, we salute you. Even Jeremy Beadle has more friends than you. People point at you in the street. Dogs gravitate to your garden to do their business.

Have you ever offended a witch doctor? Because Graham, matey boy, you are cursed. Everywhere you go, death, famine and plague follow. Kindly leave the solar system before you do some real damage, you sad, sad lonely man.

Well, that was a bit spiteful, wasn't it? Just because he managed to drop England out of the European Cup without winning a single match. It could happen to anybody.

But it didn't. It happened to Sadman Taylor. Ha ha ha ha ha ha. The man looks like a deputy headmaster. I don't even like football, and I think he's a plonker.

And now poor old Krisalis have got to try and convince you to buy a soccer management game endorsed by ol' Jonah himself. Luckily, you shouldn't take much persuading cos it's a pretty damn good game.

Bear in mind that I'm not the world's biggest football fan, and that's praise indeed. I almost found myself buying a sheepskin-lined footy manager's coat. Well, almost.

Y'see, the biggest advantage of this game is that it actually makes you feel like a manager. Other footy games let you pick your fave Division 1 team, and then dump you and them at the bottom of Division 4. Not very realistic, eh?

So, with this little chestnut, you begin by choosing one of a few rather crap Division 3 teams. The chances of you getting Grimsby Utd into the big time are rather slim, but by proving yourself on the lower teams you can move to other, better teams and thus work your way up to manage your fave Division 1 team.

And if you're really rubbish and lose all your matches then you become England manager and lose the European Cup. Sorry. But you can become England manager, and of the two disks, the second is devoted entirely to that challenge.

It's a lot more detailed than other management games. Every single player from every single team is featured in a little file all of their own, including all their genuine stats. And as the game goes on, players you know and love will get older and retire and fresh new players will move up from your junior squad. Like I said, it really gives you the impression of being part of a real sport. Brilliant.

OK, the actual game. As with most of these games, it's controlled from icons and a little filofax diary thing. You can set scouts to spy on other teams or to give you a report on another player to see if he's worth poaching.

You can, of course, transfer players and even borrow them from other lower league clubs. You can train your whole team, or give each individual player more specific training. You can basically do everything except smack Jimmy Hill on his aggravating chin.

The graphics are nice and clear for the icons and so on, and in the matches it's a viewed from the top runaround like Kick Off, but with bigger graphics.

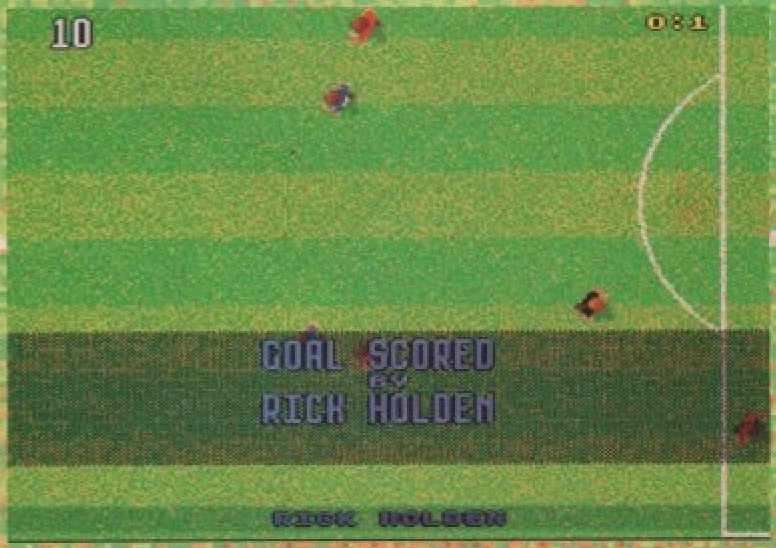
You don't get to control the action, but you make substitutions whenever you want and after it's all over you can comment on your team's performance and make them feel really insecure.

Another nice feature is the ability to watch any match from any division. So if you really can't be bothered to see how your boys do against Scunthorpe, you can go and watch the Liverpool and Man Utd match instead. Not exactly very good management, but it lets you keep track of your fave clubs while you sink without trace.

And that's another good point (by Jingo there's a lot of 'em). If your team starts to drop like a stone, you can abandon ship and move to another team. And then thrash your old team into the ground. Ho ho ho.

It's a good game basically. If it could get a response from such a sportophobic like me, then it's got to be good. Maybe people who know football inside out will find some inconsistencies, but I doubt it. I enjoyed it immensely, and I reckon you will too. Yes you. Well worth a gander.

Daniel



He shoots! He scores! The crowd goes wild!

VISION
Intuitive icons, and the matches look great.

AUDIO
Atmospheric match FX but not much room for anything else.

PLAYABILITY
Highly enjoyable, with a real sense of participation.

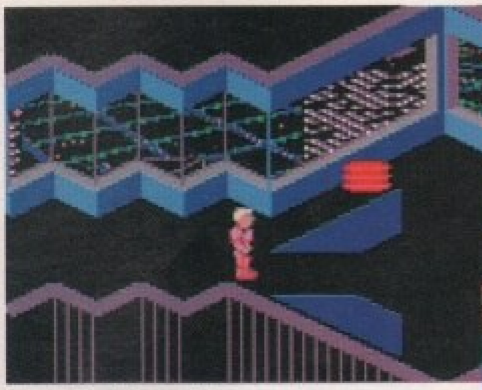
ADDICTION
Starting at the bottom really gives you something to play for.

87%

The geneing of life, it's...

D/GENERATION

MINDSCAPE ▪ £19.99 ▪ 1/2 meg ▪ Joystick ▪ Out now



Now this might not look scary to you, but it's brown trousers time for me!

We've not had a puzzle game in Gamer for ages and ages. Well, at least not for two issues. I bet you puzzle freaks are just thirsting for a bit of a brain drain.

Puzzle games are alright with me, but what if you had a puzzle game and turned it into a 3D isometric puzzle game with lots of shooting of lasers and things that you would never see in a normal puzzle game?

If only there was one like that. Hark, what do I see bounding over the hills like a breath of fresh air, but a puzzle game with the odd title of D/Generation and, look, it's got loads of lasers and stuff you wouldn't normally see in a puzzle game.

D/Generation is a Neogen. I bet you're really confused now, so I'd better start from the beginning. You play the part of a man, a male, a bloke, a non–woman, got it? The poor little chap hasn't got a name and personally I think he should have one, so I will christen him, Eric.

Eric isn't a muscle bound hero with a super weapon and neither is he a normal hero without a super weapon. Eric is just a delivery boy armed with only a simple package, but – and this is a but that will alter Eric's whole life – the package contains something that could save the whole wide world and more likely will make Eric the president or something.

Eric has to deliver the package to Singapore to a place called the Genoq Biolabs. The Genoq Biolabs produce Neogen organisms and these Neogens have escaped. The Neogens haven't worked out how to get out of the labs – yet!

Prior to the out-



Hmm, this is a bit of a puzzle. Now all we need is Richard O' Brian from the Crystal Maze to top it all off!

break, some recon satellites spotted an explosion near the top of the building. This is where Derrida, the head scientist, is creating the next Neogen prototype, the D/Generation.

There are three other generations of Neogens. The A/Generation is a bouncing red ball that smothers its target and can cloak itself by going transparent. There is the B/Generation which is a bouncing blue cylinder that crushes its target. It's extremely fast and can hide in the floor. The C/Generation is a humanoid that can disguise itself as anything, animate or inanimate. This Neogen decapitates its targets (gulp!).

Finally there is the D/Generation. The good news is that there is only one D/Generation in excistence; the bad news is that it's equipped with sophisticated neuro–holographic camouflaging, so it can disguise itself as anything. It also has a super–hardened dermal layer that acts like a sheet of armour, making it virtually indestructible.

If the D/Generation were to escape from the labs out into the real world it would threaten the life of every single person on the planet (double gulp and even a slight gasp!).

Unfortunate Eric has unknowingly walked into the building to hand in his package and the door has closed behind him. Eric finds the receptionist hiding behind her desk. She tells Eric that Derrida has been demanding the package and it is extremely important to Derrida. Eric's mission is that he must take the package to Derrida and if possible rescue any survivors that he finds along the way.

Well I suppose after all that waffle, you're probably wondering whether it's any good. Well personally – and this is only my opinion – I think it is good.

D/Generation is a nice refreshing change. If you're fed up shooting wave upon wave of aliens and bored stiff of beating the hell out of enemy upon enemy, then D/Generation could well be worth a look.

The puzzles range from the easy to hard. Some are obvious, some are not so obvious. As well as using your head to solve the puzzles, you have to be pretty good at waggling your joystick. There are plenty of A/B/C/Generations all looking to squash and mangle you to death. D/Generation takes a while to get into, but once you're in there you might find yourself trapped and unable to get out. The game is massive with about 20 levels of puzzling that'll keep you entertained for ages and ages.

D/Generation doesn't have that certain something that makes it stand out from loads of other games, but it's a really good and very enjoyable puzzle-'em-up.

Jonathan

VISION
Nice graphics that give the game that futuristic feel.

AUDIO
Not much sound apart from a couple of samples.

PLAYABILITY
Easy controls make it great fun to play. Plenty of depth.

ADDICTION
Might get lost in your games collection, but one to come back to.

81%



Come with me fair and beautiful maiden and I will take you away from all this evil that is afoot.



Arrgh, Space Hopper attack!

"It isn't every day you get sucked up into a big tube," reflected Eric

A computer that'll give you some information, but you can't play space invaders on it!



On your marks...

INTERNATIONAL SP

EMPIRE ▪ £29.99 ▪ ½ meg ▪ Joystick ▪ Out now

Every four years, a small event called the Olympics arises. Almost every single games company fights for the ultimate Olympic licence.

The money that floats around must be incredible. Unfortunately, International Sports Challenge is not the official Olympic game, but it is really rather good.

A bit of history for you. Anyone reading this remember Daley Thompson's Decathlon on the good old Sinclair Spectrum? Yes, of course you do, it was the start of something big and it would revolutionise athletic games for ever and ever. Amen.

Yes, the one game that would be responsible for the end of an era. As you may or may not know, Daley's Decathlon involved tapping two keys as fast as you could. This undoubtedly led to the N and M being worn out before any of the other keys.

This, among other things, led to the death of my Spectrum, so with a tear in my eye I waved goodbye to the good old Speccy and said a big hello to my brand spanking new Amiga. Hurrah, hurrah and thrice hurrah.

Being a sentimental and thoughtful sort of guy (you've got to be joking – Ed) I still look back to the days when Daley ruined my micro, but in some way maybe it was a godsend and I was meant to receive an Amiga on that fateful day.

Since Daley, sports games have come and gone, but as I said a few words back, it's the time of the Olympics and sports games are big business to these software companies.

For starters, most sports game are dead easy to produce – all you have to do is produce a simple joystick waggler, or that's how it seems to me, which is unfortunate for you the punters, yes you, the ones who have to fork out £25 or more a time for such software.

It's your decision and with tons and tons of Olympic games software available, it's you the punters who will make or break these companies. Whoops, I've just realised.



It's packed with peanuts and it's just so satisfying. Marathon or should that be Snickers? Who cares?

I have made a major error. This is not an Olympic Games game. It's only got six different sports in it, so it's got nothing to do with the Olympics.

Blimey, that was almost a catastrophe. It's easily done though, especially with the images that cover the box. There are six events – diving, cycling, shooting, swimming, show jumping and the marathon.

The marathon is the "key" event. You start with the marathon and in between you travel to all the different events. After the event has finished you return to the marathon to check on how you're runner is doing. You can alter his rhythm and speed, plus you can tell him what to take on the refreshment stand.

You have a choice of glucose, water or steroids. Oops, I mean a sponge. Don your swimming togs because the next event is diving.



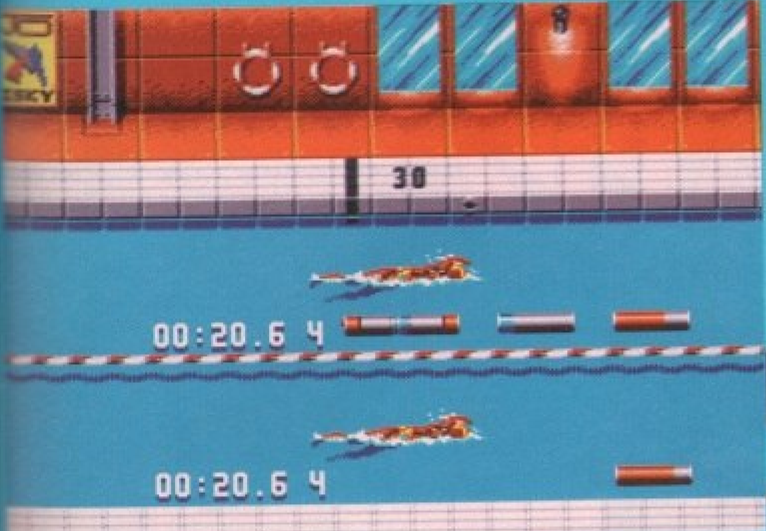
Whoop whoop! Dive dive!

Yes, you to can dive like the pros or y… could be a complete amateur and bellyflo… but at least it'll be a flabtastic bellyflop. To b… honest, it's not a bad diving event. F… starters you can actually do a proper di… and yes you do feel quite happy when yo… do an inward reverse double piked som… sault.

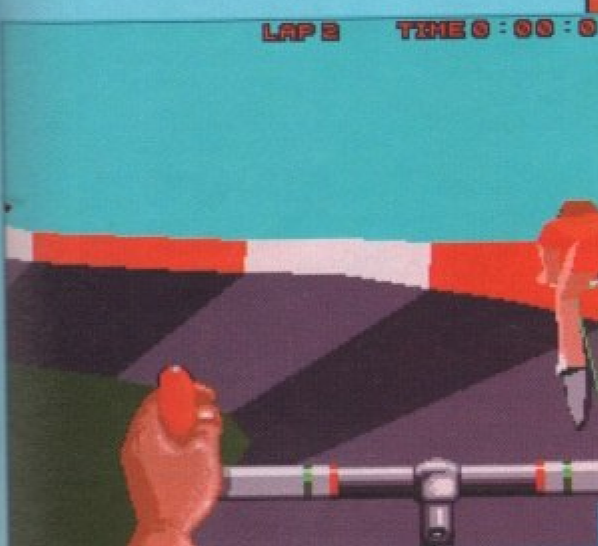
Show Jumping's next. Now this is th… only event in the whole game that is gu… anteed to raise a smile. For starters, it's al… 3D. It doesn't actually feel as though you…

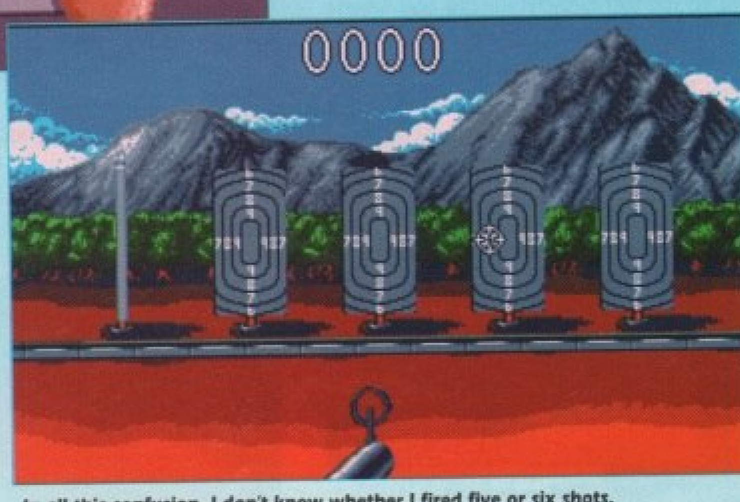


PORTS CHALLENGE


This could be a really exciting and witty caption about swimming, but it isn't!


Jump, Kris Kross will make you, Jump Jump...


I want to ride my bicycle, I want to ride my bike, I want to ride my bicycle, I want to ride it where I like


In all this confusion, I don't know whether I fired five or six shots. I guess you have to ask yourself, do you feel lucky punk?

riding a horse, it's more like driving a car. I found this out when Dobbin kept on doing three point turns and especially when he got pulled over by the cops and had to take a breath test to see if he'd been riding while under the influence. To keep you entertained, there are several different courses.

Back to the baths for the next part, it's swimming. The competition allows you to choose between four strokes, three different distances and three different competition levels. This is an almost straightforward waggler.

At the bottom of the screen there is a stroke bar which displays the speed and rhythm of your stroke. A heart will appear on the bar each time you need to breathe.

The only other waggler in the whole package is the cycling. As in the Show Jumping, the cycling is a 3D vectory-type thingy. This is one of the more exciting events. You start waggling your stick and for the first couple of laps you have to either take the lead or follow the other cycle, then the bell rings signalling the final lap, then you go into a waggle frenzy until you hit that finish line. I know it sounds crap on paper, but believe you me it's really exciting when you're waggling away. Right, last event before the end of the marathon and it's the shooting. There are four different shooting events. Rapid Fire pistol shooting involves you shooting at five revolving targets which are marked with five scoring zones – the closer to the bull's eye, the more points you are awarded with.

Running Game target shooting means that you have to shoot running game, but thankfully these days the "game" are just moving targets with pictures of wild boar painted on them. Clay Pigeon and Skeet shooting I expect you're all familiar with, so I won't waste my breath explaining it all to you. After you've completed all these events, you go back to the marathon to guide your man home to the finish line. Unfortunately I always ended up about fifth and still haven't won it, but I'm sure you'll be able to do it tons better than me.

Right, that's another review done and dusted – all I need to tell you now is what I think about it. Overall International Sports Challenge is a very polished product indeed. The 3D bits add a new dimension to the genre, plus the fact that you have the marathon running all the way through the game – another new idea which works well.

I can't actually compare it to any of the other recent sports games, simply because I haven't see any of them. The graphics are good and the sound is fairly average, but the playability is excellent.

I think you'll probably come back to this one even after all this Olympic business has died down. I liked it, but it doesn't last too long which is probably its only major fault, mainly because there aren't enough events.

Also, £30 is a bit expensive, but if you're feeling in a particularly sporty mood then I would recommend that you buy this.

Jonathan

VISION

Great graphics, especially the fantabaroonie 3D bits.

AUDIO

Fairly average sound, nowt special.

PLAYABILITY

Simple control system, good for the beginner.

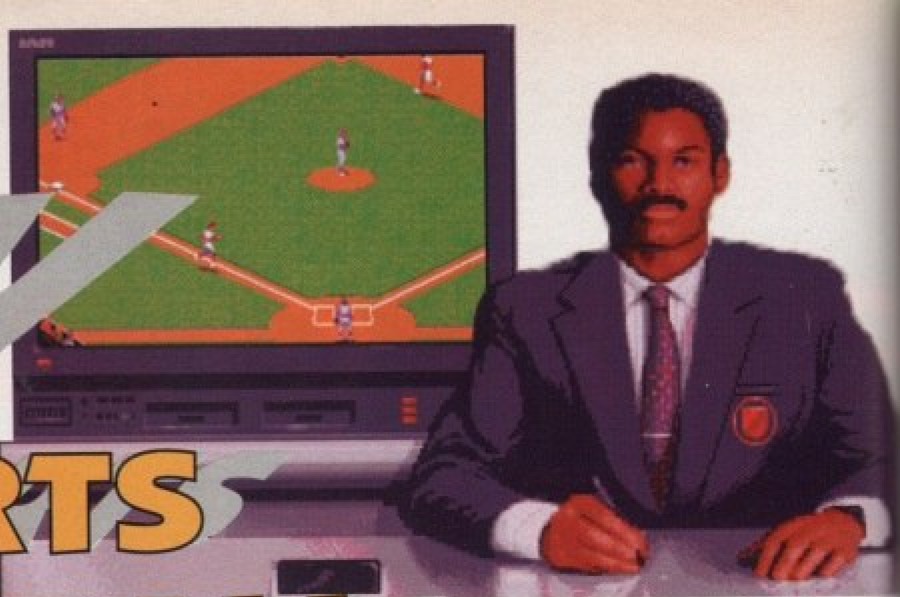
ADDICTION

You'll come back to this, eventually.

80%

Slide Charlie Brown, Slide...

TV SPORTS BASEBALL



That TV screen used to be just plain black, but than to a bit of jiggery pokery with the Apple Mac, it now has a shot from the game in it. I am clever...

MINDSCAPE ▪ £25.99 ▪ 1 meg ▪ Joystick ▪ Out now

TV Sports Baseball is the third release in the TV Sports series. American Football was the first, and it just so happens that it was rather good. I say was, because the game has now been superseded by the highly acclaimed John Madden's Football.

Next in the series was TV Sports Basketball, which oddly enough received a number of mixed reviews. Now here's TV Sports Baseball, and you know what? Baseball is a funny old game (Acme Jimmy Greaves quote).

The idea behind it is simple. Whoever scores the most points wins. A point is awarded by running around all four bases.

It's just as simple to play. A pitcher hurtles a ball at the batter – and when I say "hurtles" I mean it, because some of these pitchers can throw balls at speeds of up to 90 miles per hour. The batter must hit the ball – if he doesn't it's called a strike.

If the batter misses three times, it's three strikes and he's out. If he manages to hit the ball, he must run to first base or further depending on how far the ball travels.

If the ball's hit over one of the surrounding fences, the batter scores a home run, everyone goes a bit bonkers and the batter is allowed to trot around all four bases looking very smug indeed.

Unfortunately for the batter, there are many ways of getting yourself out. One – you can be caught out. Two – three strikes and you're out. Three – while running between bases you can be tagged with the ball and you're out.

Ahem. Four – while running between bases, the fielders can throw the ball to the base where he's running to and stump the base – the poor hapless batter is out. Five – if the batter hits the ball behind, it's one strike. If he does it again it's two strikes, but if he does it again he doesn't get out.

I told you it was a funny game, this baseball lark. So he's not out, but it improves the pitcher's chance of getting him out. As you can see, the odds are heavily weighed against the batter.

Well, that's the game and some of the rules explained. What you're probably wondering is if this TV Sports Baseball malarky is any good. The answer is no with a capital N. It's rubbish.

For starters, take a good long thoughtful look at baseball. What did you see? Just kidding! When I look at baseball I see atmosphere, I see thousands of completely mad Americans screaming and shouting for their teams. In TV Sports Baseball you could hear a blooming pin drop. There are a few samples of the umpire shouting "Ssstttrrikkkeeee Onnneee" and so on, but the only crowd sound is when you score a home run and the crowd suddenly spring into action. No, nein, non, zilch atmosphere.



NEW YORK N SEASON OFFENSE									
NAME	PS	B	R	SB	CS	BB	SO	OBA	SLG
SHINGLE	1B	L	0	0	0	0	0	.000	.000
RODRIQUEZ	1B	R	0	0	0	0	0	.000	.000
BROWN	2B	S	0	0	0	0	0	.000	.000
KLEIN	2B	R	0	0	0	0	0	.000	.000
HOMLER	SS	R	0	0	0	0	0	.000	.000
GRANT	SS	R	0	0	0	0	0	.000	.000
HOPKINS	3B	S	0	0	0	0	0	.000	.000
KAYE	3B	L	0	0	0	0	0	.000	.000
GRICE	LF	R	0	0	0	0	0	.000	.000
FRANKEL	LF	R	0	0	0	0	0	.000	.000
DAVIS	CF	L	0	0	0	0	0	.000	.000
BRUSH	CF	R	0	0	0	0	0	.000	.000
BERMAN	RF	L	0	0	0	0	0	.000	.000
ADRAY	RF	R	0	0	0	0	0	.000	.000
SADJA	C	L	0	0	0	0	0	.000	.000
WADE	C	R	0	0	0	0	0	.000	.000
TEAM			0	0	0	0	0	.000	.000
OFF.			0	0	0	0	0	.000	.000

Great statistic screens of our time – No. 1,756

The second problem is batting. I know baseball is a tough game, but at least let me hit the ball. The ball comes at you like a nuclear missile – well sort of – and you swing your bat in hope that you're going to hit it, and miss. Next ball, you swing, you miss. And again and again until it's time for you to field. When you eventually hit the ball, you haven't a clue how you did it.

Most of the time it's a foul shot, or you smack the bugger, it looks as though it's going to be a home run and it drops pathetically into some fielder's hands and you're out.

Fielding is much more fun than batting, simply because it's easier. As I write, I'm on my fourth match in the league and still haven't won. It's not because I'm rubbish – no one else in the office can do it either.

On the press release it says, and I quote: "The most complete computer-baseball game ever developed." I think that should have had a great big "not!" at the end because someone somewhere's been telling porkies.

The graphics are fairly good, but they're not as good as RBI Baseball 2. In fact the whole game is nowhere near as good as RBI Baseball 2.

To top it all off it needs a megabyte of memory, and I thought one meg games were meant to be good. Take a look at Team 17's Project X and Alien Breed to see how a one meg game should be made.

If you love baseball don't waste your money on this – you'll become terribly depressed. Turn Channel Four on and watch the game instead.

Jonathan

VISION

Graphics OK, but nothing special.

AUDIO

A measly crowd cheer and a few duff samples. Very poor indeed.

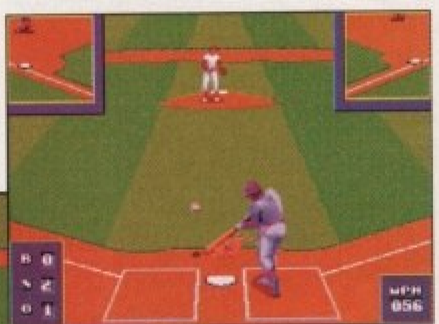
PLAYABILITY

As addictive as having a baseball bat shoved up your backside.

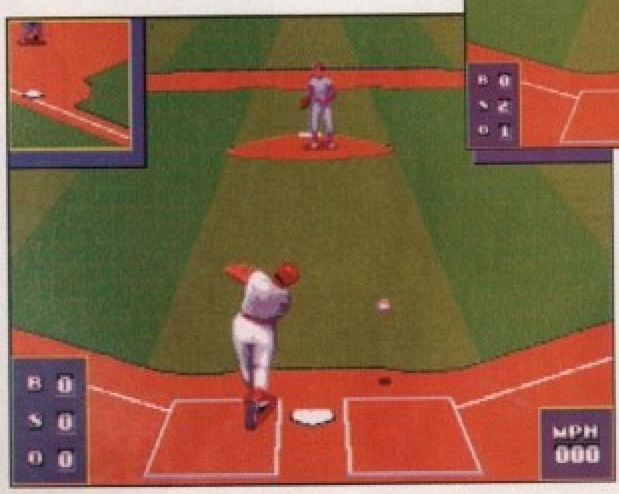
ADDICTION

Fielding is good fun, but batting is awful.

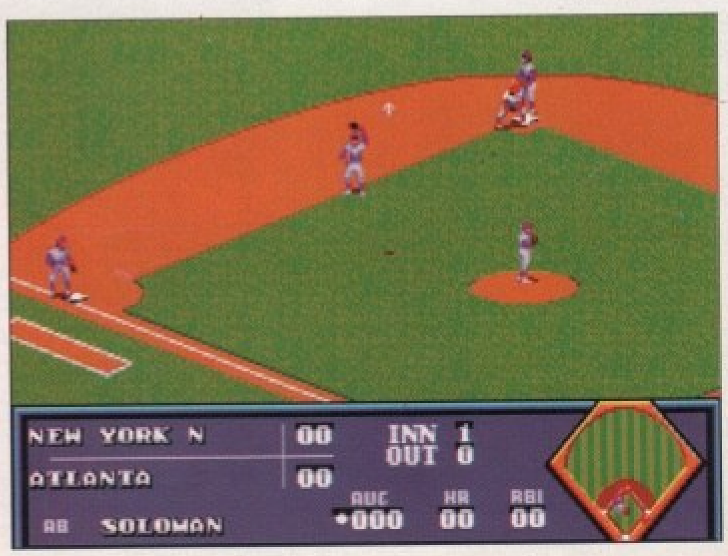
40%



Will he or won't he get a home run? Will he or won't he hit the ball?



I can feel a home run coming on. Unfortunately it's going to be for the computer...



Whenever I see baseball, all those fond memories of Snoopy come flooding back. I used to have a Linus Blanket you know – ahhhh, those were the days.

The Gamer guide to MONKEY ISLAND 2



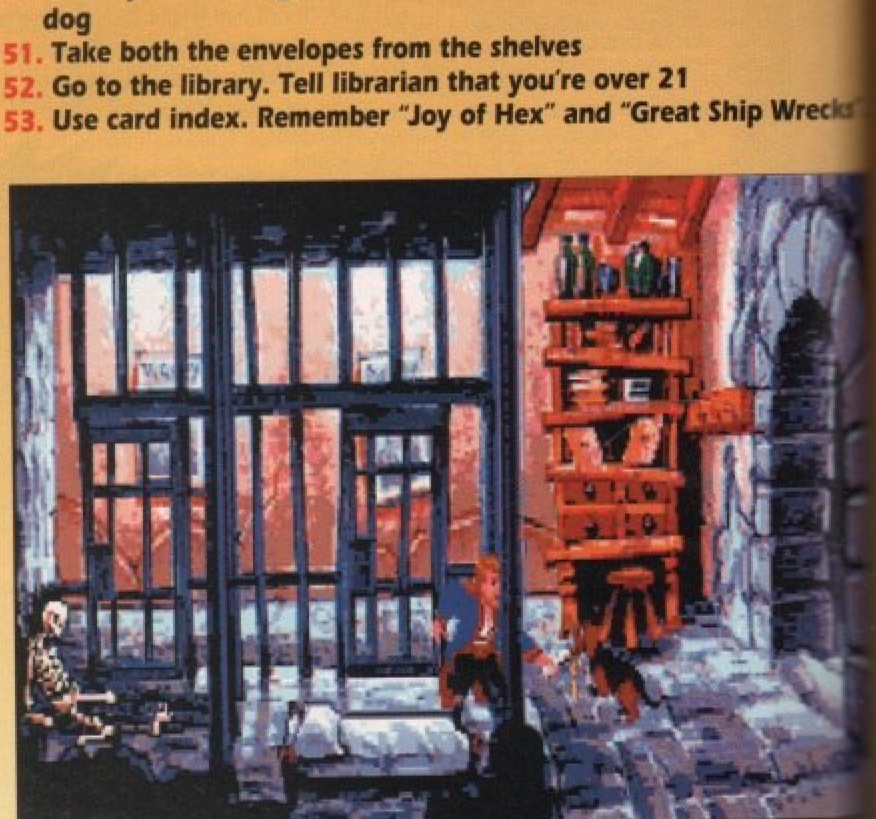
cheat mode

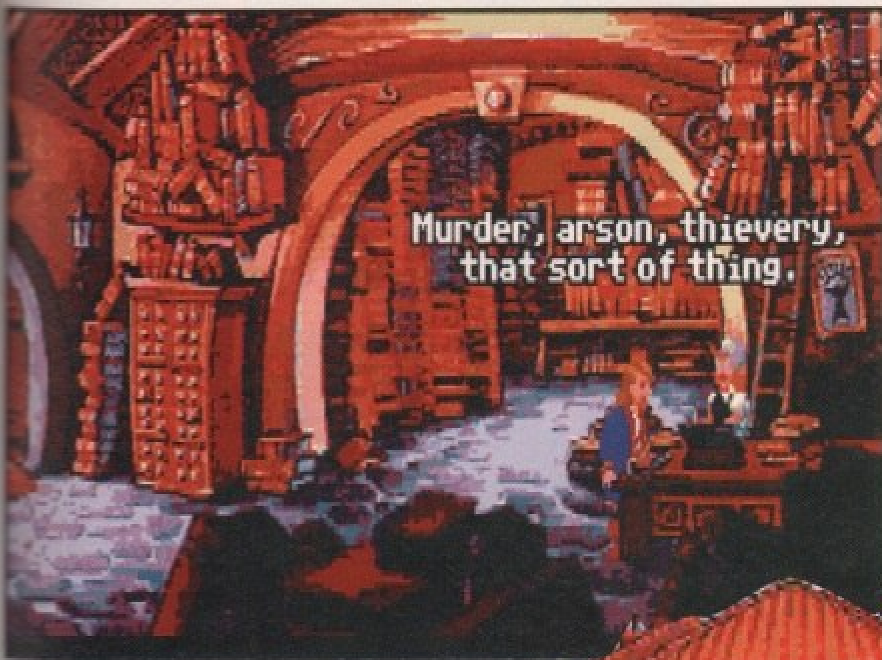


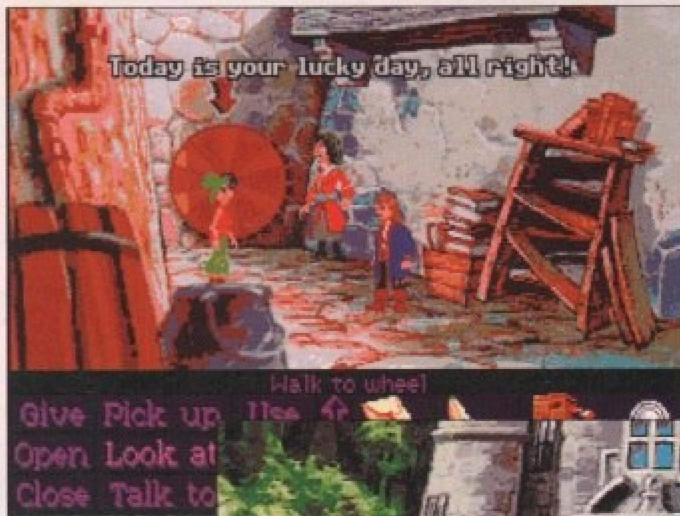
Monkey Island 2. What an absolute pant-ripper of a game. And you obviously thought so as well, judging by the number of anguished phone calls and letters we've been receiving.

But fret ye not! Out of the mist strides the spooky M Farthing with his players' guide. This'll take you as far as the second map piece (cos that's as far as he can get) but we'll give you a bit of our own advice along the way. Over to you, you old sea dog...

1. Take the shovel from the sign
2. Talk to the three pirates, get money for wood polish
3. Go to carpenters, buy wood polish
4. Go back to pirates, polish leg (up to 19 times)
5. Enter Bloody Lip Bar via window at the back
6. Get knife
7. Go to hotel. Cut crocodiles rope.
8. Go to Largo's room and nick his wig
9. Go to cemetery and dig up Largo's grandad (zoiks!)
10. Pick up bone
11. Go to the map makers and nick a piece of paper
12. Return to Bloody Lip Bar and talk to barman
13. Use paper with the, ahem, phlegm on the wall
14. Go to the pirates and nick their bucket
15. Go to the swamp and use the bucket with the swamp
16. Go back to Largo's room and shut the door
17. Use the bucket of swamp mud on the door
18. Splat!
19. Follow Largo to the laundry
20. Back to Largo's room, shut door and take the ticket
21. Collect Largo's laundry
22. Go to the swamp, use coffin and row to the shack
23. Give the wig, phlegm, bone and undies to the spooky woman
24. On the way out, take the string from the table
25. Trot back to Largo's room
26. Take cheesy snacks from the Croc's bowl
27. Use the pins in the voodoo doll when Largo's nearby
28. Off we pop to the beach, picking up the stick from the path
29. Back to the crap pirates
30. Open box, use stick with box, use string with stick, use chees things with box
31. When the rat eats the cheesy things, use string, pick up rat
32. Go to Bloody Lip's kitchen via window, dump rat in the soup
33. Go back round to the bar, and ask for a stew
34. Accept the job, and nip out of the window
35. Go to the map makers, and nick his monocle when he puts it down
36. Go to the pinnacle, give Cap'n Dread the monocle, charter ship
37. Take parrot chow, enter cabin and head for Booty Island
38. Huzzah! We're on our way!
39. Go to antique shop and buy th saw
40. Back to Scabb Island
41. Go to the pirates and saw off his wooden leg
42. Go to carpenters, and nick a hammer and some nails
43. Back to Booty Island (you're not seasick are you?)
44. Go to Stan's Coffin Shop, talk to Stan, then leave
45. Re-enter shop, ask to see coffin again
46. When Stan gets in, close coffin and nail him in
47. Get crypt key from the back wall
48. Use hammer on cash register
49. Go to Phatt Island, get arrested
50. Pick up mattress, get stick, use stick on dead dude, use bone on dog
51. Take both the envelopes from the shelves
52. Go to the library. Tell librarian that you're over 21
53. Use card index. Remember "Joy of Hex" and "Great Ship Wrecks"











54. Get the three books from librarian
55. Open model lighthouse and nick lens
56. Go to Governor's Mansion, tell guard there's a fire, go upstairs
57. Use useless third book with book on his bed
58. Go to Scabb Island
59. Go to cemetery, use crypt key on crypt
60. Look at "Famous Pirate Quotes" book
61. Open coffin that matches Rapp Scallion's quote, get ashes
62. Go to swamp, ask Mojo lady about Ashes2Life
63. Go to crypt, use Ashes2Life on Rapp's ashes, say you'll check the gas
64. Go to hut on beach, use key on door, switch off gas
65. Go to crypt, re-animate Rapp, tell him about the gas
66. Bingo! One map piece!
67. Go to Phatt Island
68. Go to the alley near the library, watch little dude knock on door
69. Use slot, ask for winning number
70. PAY ATTENTION. Save the game each time you get an answe right. Count the number of fingers he holds up. IGNORE THE NUMBER HE SAYS. He'll hold up some more fingers. When he asks the question, give him the number he held up the first time. Go that?
71. Go to Wheel of Fortune in the next alley, place bet on winning number
72. Repeat steps 69 to 71 until you've got all three prizes
73. Go to Booty Island
74. Go to costume shop, show invitation, pick up your "costume"
75. Go to party at the mansion, nick map piece, leave mansion
76. One tearful reunion later, try and get the map piece back, don't worry when it flies away. It's in hand (fnrr fnrr!)
77. Go round the back of the mansion, push dustbins
78. Run right around the house with the chef in pursuit
79. When you come round to the kitchen door again, nip inside, steal a fish
80. Pop back into the party, go upstairs and take the oar, back outside, half-inch the dog as well. You fiend!



81. Go to Phatt island, talk to fisherman, show him the fish
82. Go to Booty Island, go to cliff, use fishing rod on map
83. This is getting silly, isn't it?
84. Go to the big tree, use oar in the hole next to the plank
85. Climb on to the oar. Spooky dream sequence bit...
86. Pick up the broken oar, take it to the carpenter on Scabb Island
87. Return to the tree on Booty Island, use the oar in the hole, climb onto oar, take plank, use plank in next hole, climb on plank, pick up oar, use oar in next hole and so on...
88. Get telescope from furthest tree house
89. Enter tree house, use dog on the mound of paper
90. Caramba! Map piece numero deux!

Righty, we've got quite a way into the game here haven't we? Thanks to the mysterious Mr. Farthing for his considerable help.

Just to give you a kick start on your search for the next piece, you'll need to win the spitting contest by fair means or foul (but mostly foul), charter the glass bottomed boat, study your books, and go for a bit of a dive. If you figure that out, then you'll be able to "get ahead" to get the map. Cryptic, eh fellow funsters? Remember, never a cross word.

The game from Hell is back

SUPER TETRIS



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A puzzle for you. Do you know who invented Tetris? No, it wasn't Keith Chegwin, although you're quite close. I'll tell you. It was the Devil.

Yes, Tetris is Satan's computer game. It's a brainwashing device, designed to turn the people of Earth into drooling techno-zombies. And, God help me, I love it.

You see, Tetris is full of Satanic messages. And we can prove it. We videotaped a game of Tetris, and then played it backwards. And there it was, in Morse code. "Worship Satan" it said. "Hey Kids! Fancy going to a party round at Satan's house?". Stuff like that. Gulp.

Ever since, Biff's taken to spinning round violently, cursing at priests in Latin and spewing pea soup everywhere. Some things never change, eh?

So, Microprose have joined up with the Dark One and brought "that game" to the Amiga once more. And this time it's Super, apparently. Let's fill up on holy water and take a closer look...

First of all, who doesn't know what Tetris is about? Just you, eh? You must be a bit of a sad case. Well, just for you, I'll explain it. Take a look at the screenshots, as this'll help you visualise what I'm on about.

You've got a "pit", and different shaped blocks tumble from the top. By rotating them, you've got to make complete lines in the pit. Each complete line vanishes, thus leaving you more room. Each incomplete line remains where it is, and clogs up your pit. If the blocks reach the top, it's game over. And that's it.

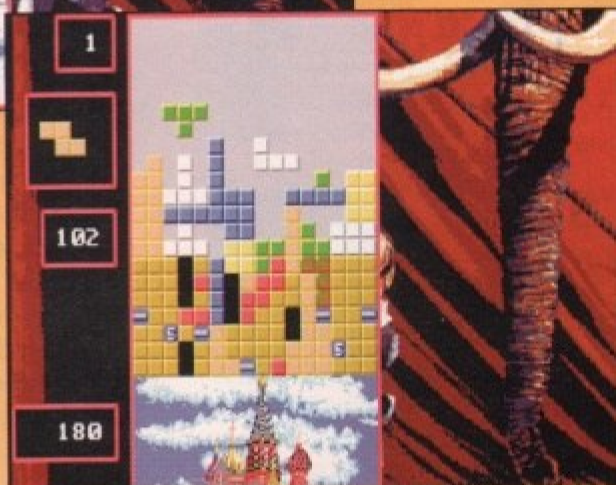


A couple of completed lines coming up, while the little Russian girls gaze lovingly at the elephant's trunk

Now, on Super Tetris things are a bit different. We've got some new features to talk about. So let's go through them one by one.

For a start the pit starts half full of blocks. You've got to clear this "rubble" to progress to the next level. The trouble is, you've only got a limited number of blocks per level.

For each line you complete, you get two bombs. These can be used to blast away your cock-ups, or to collect treasure. Which leads us on to...



A co-operative two-player game in progress. Note the wider pit, to make more room for two

The treasures. These nestle in among the rubble and can be collected by hitting them with bombs. The bonuses range from extra pieces, destroying a whole line or giving you one of those elusive and ever so handy long blocks.

You've got a two-player option where you can either play against or with your friend. You can also link up two Amigas and play that way. There's a timed game where you've got to finish each level in under a set time.

Perhaps the most bizarre addition is the Save Game option, that lets you load up your old games and carry on where you left off. Spooky.

So that's what's "Super" about this new version of Tetris. Is it worth it? Erm, to be honest, the answer is no. Tetris has been around for yonks and you can pick up a perfectly adequate version of it from any good PD library. In fact, I do believe we've given you a version of it on the CoverDisk not so long ago. As have most computer magazines.

The problem isn't that Super Tetris is a bad game, it's not. It's just that it's vastly over-priced, and the new changes don't justify the price. I'd even put money on the fact that in about three months you'll be able to get a PD Tetris with the same features, probably called Super Twonktrix or something.

This is a tricky review. As you can see, it scores highly on all counts as it's technically a good game. I enjoyed it, but then I got it for free.

With that in mind, the overall mark has been chopped down because of the extremely dubious value for money. Just thought I'd explain that. You've probably already got Tetris anyway. Don't bother.

Daniel



And this is the competitive game. Bugger up your opponent's plans at every opportunity

VISION (4/5)
Nice background piccies, with a Russian circus theme.

AUDIO (3/5)
OK for fans of Russian folk music, and some nice explosion FX.

PLAYABILITY (4/5)
It's still Tetris but are the changes worth £30? Nope.

ADDICTION (5/5)
No surprises here for one of the most addictive games ever made.

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Handling

With this article we complete our introductory overview of ARexx. We have looked at all the main constructs of the language, from the predictable DO loops, IF statements and functions, to the more novel macro, parsing and compound symbol features.

We have also seen the all-important ARexx ports which allow the interprocess communication, and their related host addresses.

In future we will be looking at more specific subjects from the varied and resourceful world of ARexx, including access to Amiga system structures from ARexx, specific ARexx-based languages supplied with major packages, interesting new libraries, examples of automation scripts, ARexx compilers and much more.

It would be wrong to conclude any overview of ARexx without looking at one of its most interesting features – the ability to generate code dynamically.

Admittedly this is a more advanced feature, but anyone who wants to use ARexx for more than mundane automation tasks will find it quite rewarding to explore. The dynamic abilities of ARexx allow it to address some major programming tasks, much more easily than, say, Basic, or other languages.

What does dynamic code handling mean? Well, first of all, ARexx can create new variables while it runs, and it can "drop" old ones – we saw this last time, when we looked at compound symbols.

Not only that, but it can also create variables with names specified by the user as the program runs! It can also accept or build program lines – not originally in the code – and run them just as if they were normal ARexx program lines.

These abilities are achieved using the very powerful Interpret instruction, and its sidekick, the VALUE() function. Interpret takes any expression as an argument, and, after evaluating it, attempts to interpret/execute it just as if it was the next line of the code.

By this means, it is actually possible for a program to create commands for itself while it is running, and subsequently to run them!

The following simple example takes advantage of this, in order to implement a simple "readloop". This reads each line typed in at the "?-" prompt, and runs it just as if it was a regular ARexx clause (command line):

```
/* a simple readloop */
do forever
options prompt "?-"
parse pull inputstring
if inputstring = "Bye" then break
interpret inputstring
end
```

Note that in the above program, the input (inputstring) is actually a variable until it is converted to a clause by the Interpret instruction. You can probably already see the enormous potential of this.

The contents of the string to be Interpreted can be any valid ARexx code – the string can contain more than one program line. It is considered as an independent unit block, not unlike the blocks specified within a DO...END range.

A Break clause within this string will make the program break out of the Interpret instruction, but there must be no Leave or Iterate instructions, unless they are in the context of a DO loop. Other than that there are hardly any restrictions.

In the above example we see an arbitrary string being executed as a clause. If the contents of this string are,"var1 = 77", a new variable called "var1" is created and given the value 77. Now, to complete the process, we will also need the ability to retrieve the value of a variable whose name we specify.

This is done with the function VALUE(). The argument to this function is an expression which evaluates to the name of the variable. Consider the following example:

```
/* Using the value() function */
var1 = 77
var2 = 'var1'
say value(var2)
say value('var2')
```

You will see that in the first case "var2" is evaluated, and the result, "var1" is used as the argument, so "77" is printed out. In the second case the literal value of the string, ie "var2" is used as the argument so "var1" is printed out.

So, not only can variables be created but they can also be accessed by their names while the program is running! In most other languages this is only possible while tracing/debugging.

The VALUE() function can thus be used as a kind of a pointer to give us the value of a variable during run-time – a lot of power here, but also a lot of potential for errors.

This is not possible in other languages such as Basic, where all variable names must be declared at the start, and the language prevents any mixing of the variable names with the variable contents.

As well as being able to find the value of a variable specified during run-time, ARexx is also able to give us certain information about it, such as whether the variable is initialised to a value, and what kind of string it contains.

Two functions are provided for this – SYMBOL() and DATATYPE(). SYMBOL() takes one argument, the (potential) name of a variable, and returns one

The ARexx Library

Calling all ARexx programmers...

If you've recently written an ARexx masterpiece and want the world to know about it, send it in to AC. Continuing to support ARexx is a high priority and as a result we are opening the *AC* ARexx Library.

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If you want to play your part in the ARexx explosion, send your scripts and additional programs to: AC *ARexx Library, Amiga Computing, Europa House, Adlington Park, Macclesfield, SK10 4NP*

dynamic code

ARexx is mainly known for its scripting facilities, but the language also provides powerful programming tool, as Alex Gian explains

Glossary

Alphanumeric	numbers and letters only – eg "a13XYZ"
Binary	zeros and ones only – eg "1001101"
Lowercase	only lower case alphabetic characters
Mixed	mixed upper and lower case alphabetic characters only
Numeric	whole or decimal numbers – eg "777", "12.45"
Symbol	valid ARexx symbols only (see SYMBOL() function)
Upper	only upper case alphabetic characters
Whole	whole numbers only – no decimals
X	hex digit strings – eg "c0abb3", "FFFF"

of the following three strings – VAR, LIT or BAD.

VAR means that the string we have given is an initialised variable within the program; LIT means that it is a literal string, in other words it can be used as a variable name but is not currently initialised; while BAD means that the string is not a legal ARexx symbol and may not be used as a variable name.

This is a useful check to make before attempting to create new variables dynamically!

DATATYPE() is used to inform us of the contents of the variable we specify. If used with one argument, it will return one of two strings, NUM or CHAR, depending on whether the variable content is a number or a character string.

In addition, DATATYPE() can also take an optional second argument. This specifies even more detailed information to check for, and returns either 1 or 0, depending on whether the test succeeded or not. The options for the Datatype command are shown in Figure I.

Note that the first argument, as always, is evaluated before being tested, so datatype(1/2,numeric) = 1, but datatype("1/2",numeric) = 0.

As you can see, the tests provided by DATATYPE() are extremely useful, and can save a lot of boring coding.

Structures

One example of the use of these facilities might be the creation of a simple database, where the elements can be stored in variables under their own names, as they are given in. This dispenses with the need to provide appropriate structures beforehand.

Data storage is also far more flexible, and a new category, or a special case can be stored very easily, without having to modify the complete database substructure. When used in conjunction with compound symbols, this can yield some extremely flexible and powerful computing.

Note that a program which creates a database like this (a simplistic example is given in the listing below), ends up with a different set of variables to those with which it started out – the program has modified itself while running.

This approach could be taken even further, with a program modifying itself until it is quite different from the way it started. Of course, we always hope that any changes a program makes to itself are for the better!

In languages that do not allow this kind of dynamic evolution, all the possible outcomes would have to be taken care of in the initial algorithm. Dynamic code allows the flexibility to deal with the unexpected.

Programs that make major changes to themselves while running are known as self-modifying. Their real value is in artificial intelligence and other problem-solving applications.

Here the self-modification represents the new states learned by the program. However, use of code like this – powerful as it is – is extremely sensitive and prone to error unless it is very rigorously programmed, so any major complexity is better avoided.

While it does a lot to simplify small jobs, I do not recommend using it for anything complex without a good understanding of dynamic code, as it makes it all too easy to tie oneself up in knots.

The ability to intermingle the names of variables with their contents is technically known as syntax/semantics collapsing. The syntax of the program (ie the language rules) blends into the semantics or meaning of the program, (ie what the program does).

It is a prominent feature of the Lisp family of languages, which have been a major tool in AI research. Think of syntax/semantics collapsing as plastic explosive – it is flexible enough to be made into any shape you like, powerful, and should be treated with extreme care.

Now, Rexx was primarily designed to be a practical language, and was never intended for complex AI use. However, combined with its good parsing abilities, it is possible to use it constructively in a number of programming applications, for example syntax analysis and problems concerning an evolving program state.

These uses are more advanced, and we may have a better look at them in the future.

As we said, the majority of ARexx users will mainly be interested in its script automation facilities. Yet there is one application area – not as complex as AI use, but a little more involved than automation scripting – which will interest many users.

This involves the conversion of files from one format to another. ARexx was practically made for this task, and even less experienced programmers should find that format conversions are a breeze, whether they be text, graphics, or sound.

Most of the utilities that do this kind of job come from the Unix world and assume some familiarity with the C way of doing things. On the whole they have been the province of professional programmers; the amateurs having been left to plod along in Basic.

Yet with a little thought, ARexx can do quite a bit of what dedicated reformatting and pattern-matching programs like AWK, PERL, SED and even SNOBOL can do, in a surprisingly straightforward manner.

So next time you have a file you cannot use, because it is not in quite the right format, don't despair. Write an ARexx script to do the job. You might be surprised at how easy it is.

```
/* Listing 1 */
/* Simple dynamic data */
datalist = ""
do forever
options prompt "?-"
say "Gimme an object!   (Bye to quit)"
parse pull input
if input = "Bye" then break
/* ==============================================
*/
/* various checks could be made here; eg. That
*/
/* the object name CAN be used as a variable,
*/
/* and that it has not already been entered.
*/
/* We also maintain a list   this could be used
*/
/* if we want to save our records.
*/
/* ==============================================
*/
datalist = datalist input
say "Tell me sumtin' about it."
parse pull second
/* ==============================================
*/
/* we prefix all object names with "$mydb_" just
*/
/* to ensure they are unique. Imagine the chaos
*/
/* if someone entered an existing variable name
*/
/* as an object   eg. "string" or "datalist"!
*/
/* ==============================================
*/
say "Right," input "is a" second
string = "$mydb_"||input '=' second
interpret string
/* a simple query loop */
say "Whadya wanna know about?"
parse pull third
query = "$mydb_"||third
if symbol(query) == VAR then say value(query)
else say "I dunno anything about it"
end
/* ==============================================
*/
/* Before exiting, we could check the datalist
*/
/* to see what objects we have information about
*/
/* ==============================================
*/
exit 0
```

Still life

Paul Austin explains how to inject some style with the occasional still

Most videophiles assume that if an image is to appear on video it has to be animated. In fact like any other artistic exploit DTV productions benefit immensely from a little light and shade.

If a project is solely comprised of a constant stream of ever-changing animated images it soon becomes rather monotonous, and just a tad irritating – a brief glance at the average low budget music video is testament to that.

If you're trying to make a point, during a documentary for example, stills are an excellent way of producing an authoritative, news-like atmosphere.

Also, if you're an animator, stills can be a very convenient method of stretching the production without forcing your system to expend the huge amount of effort additional animation sequences require.

Bonus

Another animation bonus is that stills offer you the opportunity to display images as they really are, rather than being forced to compromise quality as is often the case when imagery is compiled into an anim.

If you're the lucky owner of one of the many 24-bit display boards, stills may be the only method you'll ever have to show your work as it should be rather than suffering the sometimes painful transition to Ham, which is still the only really viable method of displaying photo-realistic full screen images without the assistance of a still frame recording system.

As I'm sure you're aware, there are countless methods of importing images into the Amiga, but no matter what the method the process invariably boils down to either scanning or frame grabbing.

In the case of frame grabbing, the conversion from live video to a still frame image is relatively painless. As you're already dealing with a video-legal image there's no palette adjustment necessary to avoid the dreaded colour bleeding so often associated with composite video.

This is a regular problem when employing scanned images which contain colour saturations which exceed 191 or approximately 12 within the Amiga's colour register.

Even though video grabs are "legal", it doesn't mean that they are completely free from harm. One of the most frequent grabbing disasters is image blur, a phenomena which is usually accompanied by a horrendous amount of interlace flicker.

This happens all the time when dealing with fast action grabs. Fortunately there is an answer which although not ideal is a lot better than the migraine-inducing effect of a particularly flickery grab. All the main image processing programs such as ADPro, Image Master and Mirage now offer a de-interlace option as standard – see this month's main feature for a head-to-head look at all three.



Stills are an excellent way of creating an authoritative news-like atmosphere

All video and broadcast images are made up of two alternating fields which are used to effectively double the resolution of the image.

Unfortunately such images are often less than ideal in their static form. De-interlacing has the effect of dividing the two signals into their respective fields.

As a result, the flicker between the two is removed. Unfortunately this does mean you lose half the original resolution.

If you plan to employ colour scans rather than grabs, life can be a little more difficult as it's essential to avoid excessive saturation.

Again, image processing is the answer, with all the mayor packages allowing adjustment of overall colour saturation as well as individual colour editing within the palette.

ADPro is particularly well blessed in this area with an all new operator which allows the user to apply broadcast limits to the image. As a result, producing a video legal image is simplicity itself.

No matter what the subject or style of your show a genlock is a near essential for a professional finish. Although direct exposures are useful on occasion – echoes being an example – the option to fade stills up or down through live video really adds to the production.

Well, that's enough advice, now it's time to dig up that long forgotten digitiser/scanner and set to work!

Practical production

If we assume the images are ready for video and in the correct proportions – interlace and overscan where possible – it's time to add them to the production.

There are several ways to achieve this, perhaps the most impressive being via Scala which can be used to introduce stills with a variety of wipes and fades.

If your finances won't stretch to Scala you could employ a PD picture viewer or even better load them into View 3.0 – the excellent anim player and picture viewer found on this month's CoverDisk.

With this program it's possible to compile several individual images into an anim and play them back frame by frame thanks to the program's single frame advance option.

When a series of stills are combined with a genlock, the results can be stunning, especially if the stills are from the actual video on display. Now you can employ the classic TV trick of "echoing".

How often do we see a still frame flashback of a flying footballer frozen for posterity after a vicious attack by a particularly ferocious breath of wind?

Now you can do the same, constantly flashing back to the high spots of any event, perhaps with a voice-over adding to the atmosphere.

Narration is another great reason to employ stills within a show. If you have a mixture of live video, computer graphics and music it's very difficult to add a voice-over without confusing the viewer.

Once again, the still can provide the quiet spot where a voice over can be added and more importantly absorbed without an apparent pause in the performance.

Apart from sporting flashbacks, perhaps the best place for such effects is within documentary-style productions. If you're working for a client who wants to establish a corporate ID, nothing impresses more than the occasional still of the boss or a panoramic shot of the new offices.

A different view

Margaret Stanger looks at ways to avoid graphics primitives

It is possible to create a screen display without Graphics Primitives commands – an enterprising assembler programmer can tell the registers exactly what to do.

The Viewport can be replaced by copper lists, and the View by DMA commands and instructions to registers. This reduces overheads if more time is needed for each game cycle. It also gives the programmer more flexibility and a chance to show off.

Some commands from the Amiga Library are still used. Commands to enable and disable the multitasking allow the program to coexist with any others, and to exit gracefully.

If I use Amiga Library commands to allocate and free memory, I can be sure that there is no clash of interest with the rest of the system. If a program is going to take over the machine completely it does not have to be so diplomatic.

The Copper can change the contents of some registers at certain screen positions. The Copper has a program called a Copper list that is stored in memory and executed command by command, at the same time as the main processing.

Colourmap

Viewports consist mainly of sets of instructions for the Copper, as can be seen from the Viewport structure. Four of the structure members are pointers to Copper lists – vp_DspIns (display), vp_SrIns, (sprites), vp_ClrIns (colour) and vp_UCopIns (the user copper instructions).

The colourmap, vp_ColorMap, is an area where the colours are stored so that the Amiga can use them when creating its Copper list. There are some structure members for the size of the Viewport and some of the display options used in the View.

There is a pointer to the next Viewport, if any. The MrgCop() command merges all the Copper lists for all the Viewports so that the instructions are in the correct order. The Viewport has a pointer to the RasInfo structure, which in turn has a pointer to the Bitmap structure. The start address of each Bitplane must be set so that the DMA controller can find the data.

A pair of registers, BPLxPTH and BPLxPTL is used for the high and low word of the address of each plane. The data can be moved into these registers from the Copper list, which is set up as follows:

```
move.l CListAddr,d0     ;Copper list address
move.l #3,d4          ;4 bitplanes
lea   BMscene,a5
lea   bm_Planes(a5),a3   ;bit plane addresses
move.w #bplpt,d3        ;register address, bit plane
pointers makelist:
move.l (a3)+,d1         ;next bit plane address
move.w d3,(a0)+         ;copy next register address
into list
add.w  #2,d3          ;update register address
swap  d1
move.w d1,(a0)+         ;copy high word of bit plane
address
move.w d3,(a0)+         ;copy next register address
into list
add.w  #2,d3          ;update register address
swap  d1
move.w d1,(a0)+         ;copy low word of bit plane
address
dbra  d4,makelist       ;until all four planes are
processed
```

For more information on how to create, set up, and trigger a Copper list, and use the hardware registers, see the Almanac page for December, 1991.

The view structure contains a pointer to the first viewport, and to the two Copper lists which are the result of all the other Copper lists merging. The main or long frame Copper list will be used here, the short frame Copper list is an additional list used for interlace mode.

The display instructions and view modes can be set by addressing the registers directly. The colours are placed in the colour registers directly at the same time.

The register DIWSTRT sets the upper left-hand corner of the start of the display (vertical 48, horizontal 129) and the register DIWSTOP sets the lower right-hand corner (vertical 304, horizontal 256+193).

This centres the screen display, allowing for the blanking gap, and the shape of the picture tube. The registers DDFSTRT and DDFSTOP determine the horizontal start and finish of the bit plane DMA.

Eight bus cycles are needed to read all the bit planes in lo-res, and four in hi-res. Register DDFSTRT contains the bus cycle of the first bit plane DMA in the line ($38 in lo-res, $3c in hi-res), and DDFSTOP the bus cycle of the last bit plane DMA in the line ($d0 in lo-res, $d4 in hi-res).

Setting the bits in register BPLCON0 activates the following functions:

Bit	Function
15	hi-res mode on
11	hold and modify on
10	dual playfield on
9	video colour on
8	genlock audio on
3	light pen active
2	interlace mode on
1	external synchronisation on

Bits 12 to 14 contain a three-digit number representing the number of bitplanes. This display has four bitplanes, colour, and no fancy ViewModes. The BPLCON2, BPLCON1, BPL1MOD and BPL2MOD registers are cleared for this display. I hope to cover these in a future Almanac feature.

Rather than re-invent the wheel, I have made use of an assembler IFF picture file reading module that I wrote for the May Issue of *Amiga Computing*. The support disk contains a fully commented version of the source code.

Because this is a general purpose IFF file reader, it works equally well with today's low level graphics, with graphics primitives or with Intuition.

I have set up a bitmap structure, as the file reader expects a bitmap structure as input. The structure will hold the four bit plane addresses, but these addresses will be accessed directly by this program, instead of being linked to a screen structure.

The other inputs to the routine are the name of the file containing the picture, and the address of the memory area where the colours are to be stored.

My next Almanac pages will have C and assembler features on sprites, vsprites and bobs, and hopefully a book review.

The demo program

The demo program on the support disk contains the source module, iffread2.a, which is the general purpose picture file reader.

The colours from the CMAP chunk are copied to the colourlist in the calling program. The picture data in the BODY chunk is read in, decoded, and copied to the bitplanes specified by the bitmap structure in the calling program. The file is closed, and control goes back to the main program.

The instructions for the start of the four bit planes is copied into a Copper list in chip memory. Instructions are added that gradually changes the background colour from light to dark cyan, and then from dark to light brown as the raster beam goes down the screen.

The CopperDMA is disabled, then enabled again after the new Copper list is put in place and triggered. The picture from the IFF file is displayed but instead of a black background, the colour instructions from the Copper list are obeyed.

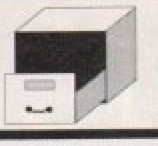
The picture is displayed on the screen until the user presses the joystick Fire button, or clicks a mouse button. The old Copper list is brought back, the memory freed, and the program exits.

A background of graded colours could be produced using a similar Copper list to the one used in the program. This could give an illusion of perspective for a game where the player has to shoot at a menacing series of wire frame triangles and squares as they rush towards him.

Another possibility is to adjust the bitplane pointers part of the way down the screen to produce a parallax scroll – this can look very effective.

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Plus points

Is Sequencer One Plus the best all-round Amiga sequencer ever? Paul Austin finds out

It's been a long time in the making but Gadjits have finally come good and delivered the long awaited upgrade to Sequencer One.

The aforementioned software was a massive seller back in 91, with a claim of 70,000 units shifted. Now Gadjits are well placed to repeat their success with this impressive sequel.

At first glance the software appears to be much the same, but lurking beneath the familiar front end are a plethora of well thought-out enhancements.

The basics of the program remain the same with full 16-channel Midi support over 32 separate tracks plus four channels devoted to the Amiga's built-in sound capacity.

The program retains the original track list, step editor and bar editor but now also boasts two new additions – the tempo and jukebox screens.

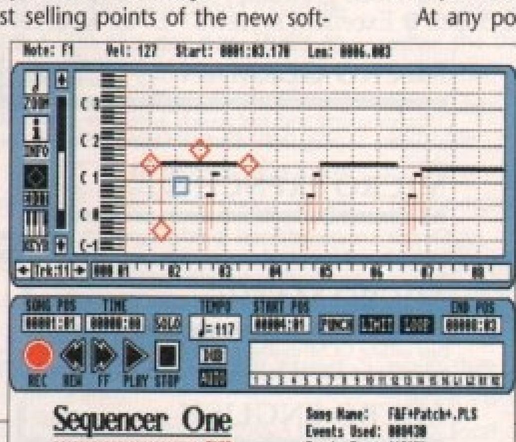
Tempo maps are familiar features on most modern sequencers but as is the norm with Gadjits, theirs is perhaps the easiest to use, thanks in part to their inspired Diamond editing system – a feature which appears throughout the new version.

Instant

Inserting tempo changes is simplicity itself – all the user need do is click within the edit window and the tempo line instantly becomes glued to the pointer as it glides over the window.

Once a suitable point in time and tempo is reached, a click instantly locks that particular change into position. The process can then be repeated as many times as necessary.

The strongest selling points of the new software has to be Diamond editing. On most sequencers editing individual notes can be a laborious process but thanks to the new feature, Plus is arguably the simplest note editing environment on the Amiga.



Here's where the power of the Diamond system really starts to shine

Although present within the Tempo map where it can be used to define the interval, snap to interval, move changes or even remove the edit all together, it only really comes into its own within the Step Edit screen.

To activate the system you simply select Diamond Edit mode and click and hold down the left mouse button anywhere within the Edit window.

If you then move onto a note, the Diamond Edit becomes active with a selection of four diamonds and a solitary square surrounding the selected note.

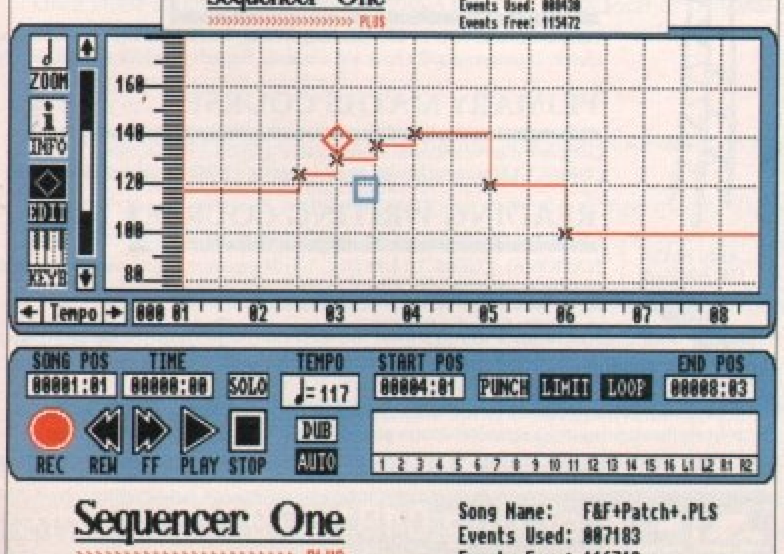
Clicking the upper diamond allows the note to be moved, while the diamonds to the left and right allow adjustment of the beginning and end positions.

Finally the lowest member of the fab four allows volume change. The real beauty of the system is that editing is instant, no requesters, no typing, just a simple click and drag and the job's done.

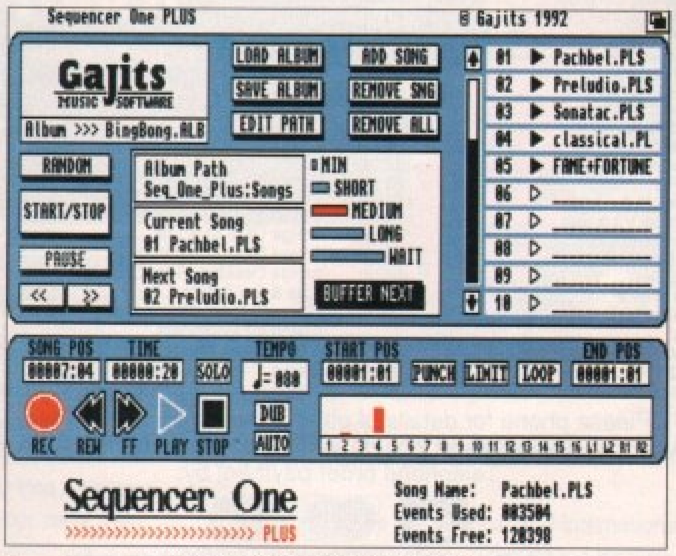
At any point clicking the right mouse instantly cancels the selection, while a click-and-release elsewhere on the screen produces a standard note – of your own design – which is then glued to the pointer and can be placed at any pitch or time position you require. All editing features also have to option to sound the note as edits are made.

The mysterious blue square is the last element of the Diamond system. Unlike all the other Diamond icons this produces a pull-down.

As in the tempo map, there are options to define an interval at which notes will appear and of course lock the note in question to the newly defined point if required.



Tempo Mapping made simple thanks again to the impressive Diamond editing system



A huge selection of Midi creations ready to play back just like a CD...

There are also more basic edit controls which allow the note to be duplicated, deleted, resized, volume adjusted, or alter the gate settings all from a simple pop-up requester.

Although impressive additions, my particular favourite has to be the option to define a note as a control change. As a result, you can insert a program or voice change at any point, adjust the volume from that point onwards or even alter the pan position. Again Plus makes what can sometimes be a tricky procedure on other sequencers simple.

Identical

As mentioned earlier, the main body of the program remains almost identical. As a consequence, any upgrader should feel perfectly at home, especially with the upgrade cost being a very reasonable £39.95.

Unfortunately for the newcomer Plus is a little more expensive at £129.95. Having said that, for a sequencer boasting a very respectable 192 PPQN (Pulses Per Quarter Note) and a degree of ease of use unrivalled by the option it's nevertheless still a bargain.

Basically, Plus is ideal for two areas of the market. Firstly due to its ease of use it's perfect for the Midi beginner. Secondly it offers the speed, accuracy, and no-nonsense options that will appeal to busy professionals who are already proficient musicians and simply require a method of recording and manipulating their creations as quickly as possible.

On the down side Plus – like its predecessor – can't match some of the power features found on software such as Bars and Pipes Pro and KCS. Having said that, it's sure be a long time before the average user runs into a problem that can't be resolved with this excellent update.

Get the message

For the cost of a local call, you can talk to the whole world. Pat Winstanley breaks down the barriers...

For most people, the attraction of bulletin boards is the opportunity to download public domain and shareware programs. While this useful service is available on most BBSs, it is by no means all that is offered.

Many BBSs are linked in to an enormous network called Fidonet which offers callers to those boards the opportunity to chat to other callers all over the world for the cost of a local call.

Fidonet works in the following way. Each BBS on the system is part of a long chain which runs around the world, branching out here and there. Every night a BBS will receive messages from the board behind it in the chain, add those it has received that day from the local callers, then pass the whole lot on to the next BBS in the chain.

After a few days of this messages can travel all round the world, being seen by the callers of each BBS en-route.

So what's in the messages, and why should you bother? The message system can be likened to a shelf full of special and general interest magazines, each crammed with readers, letters.

Here you can read people asking questions, putting forward a point of view, arguing, suggesting innovations and responding to other readers' queries.

Published

The messages found on bulletin boards are just the same except that you can be certain your letter will be published since you effectively publish it yourself.

In the UK, in May this year, the statistics show that over 100,000 messages were passed round the system – around 3,000 plus per day. That's an awful lot of messages to have to read, especially if many of them hold no interest for you.

To get round this messages are divided into "echoes", each of which can be thought of as a single specialist magazine. Thus there might be an echo dealing with vintage cars and another in fishing.

The Open University has an echo of its own where students and tutors get together. As a caller you simply choose the echo or echoes that interest you and read just those areas.

Once inside an area you will find messages from all over the world on that subject. As you read you will find information, leg-pulling and raging arguments.

After a while there will be a message which incenses you so much that you just have to respond to it. At this point, simply typing something like "R" for reply – different boards vary slightly but there will be a menu to help you – will put you into a simple text editor where you can bash out your reply then save it to the BBS's hard disk.

From now on, anyone else calling the BBS and reading that area will see your message, and the message itself will travel around all the other boards on the net too so that people from all over will see what you have to say.

With so many messages flying around in different echoes, there needs to be a certain amount of policing – partly to stop illegal or offensive messages travelling around, but also to ensure that messages are kept on topic.

It's very easy to go off at a tangent and find that while the thread – a series of messages linked to each other – began extolling the virtues of a particular modem, it's now progressed to talking about someone's new car.

This is where moderators come in. Each echo has one or more moderators who keep an eye on all the messages there and warn callers when they are breaching the rules of that echo.

The rules themselves are usually posted in the echo about once a month so that everyone knows where they stand. Another reason for being off topic is when a few people start talking among themselves about local or personal matters. Since these are of no interest to most of the readers a place is needed where they can do this quietly – but where?

Running alongside the national and international echoes are two other systems. The first is a local system which is run by most boards. This is just like the long-distance echoes and may even cover the same subjects, but the messages in these areas are not passed along to other BBSs.

It's not that they are particularly private – anyone logging on can see the areas, but they are usually only of local interest.

For instance, my local board has local areas like "sysop" where callers can report problems on the board, ask for help in finding their way round, receive news of forthcoming changes and so on.

Beer

At the moment we are discussing arrangements for a local meeting so that all these names can have faces put to them (and lots of beer down put the faces too by the sound of it!)

That's fine for local people, but what if you want to talk privately with someone at the other end of the country? This is where Netmail comes in.

Netmail works in a similar way to the ordinary national echoes, but instead of everyone in the echo being able to read the messages, only the person it's addressed to can.

This is ideal if you want to help test out a programmer's new product, and need to report bugs and problems. Obviously the programmer won't want these details out in the open for everyone to see.

Get in touch

What do you want to see in this column? Contact me with your views by writing c/o *Amiga Computing*. Alternatively, you can netmail me as "Pat Winstanley" at "2:250/107.99" or "peewee@cix.compulink.co.uk". I also read the *Amiga_Computing* echo regularly – ask your sysop if he doesn't have it yet. See you there!



Aaaargh! Look at the phone bill!

Once you get going in the message areas you will find yourself spending a lot of time and money on the hobby. Even local call charges mount up after a while.

So how do you cut costs without losing touch with all your new friends? The answer is an offline reader (OLR). Most boards offer some method of bundling up all the messages you want to read and compressing them.

You can then download the bundle as if it were any other file and log off the board. With the phone safely back on the hook you can decompress the messages and take your time reading and composing replies.

Sending your replies to the board isn't quite as straightforward, but there are ways and means which I'll be covering in later months. For the moment though you can chop your costs by at least a third by downloading the messages.

Most boards will have suitable decompression programs available for download. If you're not sure, just ask the sysop who will normally be happy to hold your hand while you get the hang of things.

The AC echoes

If you would like to see what goes on in the *Amiga Computing* echo on Fidonet, the following boards are among several which carry the messages up and down the country.

Aspects (sysop Dave Gorki) 061-792-0260
01 for Amiga (sysop Tony Miller) 071-377-1358

Thanks to both these sysops for their help and guidance

Let's talk about text

Phil South taps out a few words on his Amos and realises he'd prefer a new font, colour and size

Text in computer programs is something you take for granted. I know I do, and it's hard to think beyond the kind of things that have been possible in AmigaBasic, which is what most people's programming experience consists of pre-Amos.

But Amos opens up new vistas of programming, and simply too. This month we'll be looking at how you can spice up your text, whether it be a game logo, high score table, or just the title screen of your new business program.

Text in a computer program tells you two things. The words on the screen tell you what to do, and the style with which they do it tells you a lot about the programmer's attention to detail.

Normal text tricks include clever formatting and changes of colour. But more impressive are changes of font and size. It's like the difference between typing on a typewriter and making up your text in a DTP program.

Firstly if you don't want to faff about with fonts, make your titles a different colour with Pen and centre them with Centre. But there are two kinds of text in Amos – normal text and what they call "graphic text".

Normal text is printed to the screen with a Print statement, but graphic text needs to be put to the screen using Text, like so:

```
Rem * Simple Font Prog 1 *
Get Fonts
Paper 8
Set Font 8
Ink 2 : Text 5,50,"Amiga Computing"
```

The Get Fonts command scans the Rom and Fonts: directory on disk for fonts, and Set Font sets the font to be printed to the appropriate font in the pecking order.

The colour of graphic fonts is set using the Ink command rather than Pen (they're drawn rather than printed, being graphics!).

Once you have graphic text under control you can do all manner of technical tricks like putting shadows under the text

```
Rem Totally Fontastic!
Rem
Paper 8 : Curs Off : Hide : Cls
Get Fonts
For F=1 To 30
   If Font$(F)
      Clw
      Print Font$(F)
      Set Font F
      For Y=20 To 150 Step 20
         SHAD[10,Y,"Amiga Computing",1]
      Next
      Wait Key
   End If
Next
Procedure SHAD[X,Y,A$,D]
   Gr Writing 0
   Ink 0
   For DX=-D To D
      Text X+DX,Y-D,A$ : Text X+DX,Y+D,A$
   Next
   For DY=-D+1 To D-1
      Text X-D,Y+DY,A$ : Text X+D,Y+DY,A$
   Next
   Ink 2 : Text X,Y,A$
End Proc
```

using JAM1 mode via the GR WRITING command to ensure a good impression. Or if you're particularly clever you can even add a drop shadow using



the same program but simply changing the last two lines:

```
Ink 2 : Text X-2,Y-2,A$
End Proc
```

This offsets the final white printing of the characters up and to the left of the black outline, creating a drop shadow.

Experiment with the code and see how many effects you can do. How about making the last print in the same Ink as the Paper colour, for an outline font?

More exotic effects can be obtained using Aaron Fothergill's CText program, in which graphic text is taken to its extreme. If you get this program (either from Aaron's Amos Club or Déjà Vu Software) you can create a font in Deluxe Paint and include it in your program just like the pros do.

The font is stored on an IFF picture file like the example screen on this page, and then scanned into CText a letter at a time. Then you can print it to the screen in the same way you would ordinary text, or even do a scrolly message across another screen.

Finally, Rainbow text is easy, and very effective. Basically what you have is a rainbow you set up using the copper, and the text is like a lot of holes punched through a screen covering the rainbow, giving you rainbow coloured text! Try this listing to give you a taster:

```
Rem * RainbowText.Amos *
Rem
Cls 0 : Curs Off : Hide
Gosub STRIPES
For X=0 To 23
Pen 1 : Paper 0 : Print "Rainbow Text!!!
Rainbow Text!!!"
Next X
Wait Key
'
STRIPES:
Set Rainbow 0,1,280,"","",""
Rainbow 0,0,0,280
Colour Back 0
Restore RDATA
For C=0 To 279 : Read CVA : Rain(0,C)=CVA
Next C : View
Return
RDATA:
Data $0,$0,$0,$111,$222,$333,$444,$555
Data $666,$777,$888,$999,$AAA,$BBB,$CCC,$DDD
Data $EEE,$FFF,$FFF,$EEE,$DDD,$CCC,$BBB,$AAA
Data $999,$888,$777,$666,$555,$444,$333,$222
Data $300,$200,$300,$400,$500,$600,$700,$800
Data $900,$A00,$B00,$C00,$D00,$E00,$F00,$F00
Data $E00,$D00,$C00,$B00,$A00,$900,$800,$700
Data $600,$500,$400,$300,$200,$20,$30,$40
Data $50,$60,$70,$80,$90,$A0,$B0,$C0
Data $D0,$E0,$F0,$F0,$E0,$D0,$C0,$B0
Data $A0,$90,$80,$70,$60,$50,$40,$30
Data $30,$0,$1,$2,$3,$4,$5,$6
Data $7,$8,$9,$A,$B,$C,$D,$E
Data $F,$F,$E,$D,$C,$B,$A,$9
Data $8,$7,$6,$5,$4,$3,$2,$1
Data $0,$0,$22,$33,$44,$55,$66,$77
Data $88,$99,$AA,$BB,$CC,$DD,$EE,$FF
Data $FF,$EE,$DD,$CC,$BB,$AA,$99,$88
Data $77,$66,$55,$44,$33,$22,$110,$220
Data $330,$440,$550,$660,$770,$880,$990,$AA0
Data $BB0,$CC0,$DD0,$EE0,$FF0,$FF0,$EE0,$DD0
Data $CC0,$BB0,$AA0,$990,$880,$770,$660,$550
Data $440,$330,$220,$101,$202,$303,$404,$505
Data $606,$707,$808,$909,$A0A,$B0B,$C0C,$D0D
Data $E0E,$F0F,$F0F,$E0E,$D0D,$C0C,$B0B,$A0A
Data $909,$808,$707,$606,$505,$404,$303,$202
Data $111,$222,$333,$444,$555,$666,$777,$888
Data $999,$AAA,$BBB,$CCC,$DDD,$EEE,$FFF,$FFF
Data $EEE,$DDD,$CCC,$BBB,$AAA,$999,$888,$777
Data $666,$555,$444,$333,$222,$300,$200,$300
Data $400,$500,$600,$700,$800,$900,$A00,$B00
Data $C00,$D00,$E00,$F00,$F00,$E00,$D00,$C00
Data $B00,$A00,$900,$800,$700,$600,$500,$400
Data $300,$200,$20,$30,$40,$50,$60,$70
Data $80,$90,$A0,$B0,$C0,$D0,$E0,$F0
Data $F0,$0,$0,$0,$0,$0,$0,$0
```

Phew! Sorry about all that data, but it's needed to give you the rainbow stripes. And there you see it, rainbow text. Now let them try and ignore *that* screen!

Write stuff

If you have an Amos question, then please write to Phil South, Amos Column, Amiga Computing, Europa House, Adlington Park, Macclesfield SK10 4NP.



An example of how Amos can spice up your text

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Cascades of colour

Ben Pointer throws caution to the wind and splashes out on a flatbed scanner

From the professional point of view there are two levels of desktop publishing. Mono DTP is what most of us practice, which generally involves using a bunch of mono devices like hand scanners, laser printers and even mono monitors.

If your output is going to be mono, anything to do with colour – with the exception of greyscales of course – is a waste of time and money. When you start experimenting with colour desktop publishing, the first thing you notice is that – compared to mono DTP – the costs are astronomical.



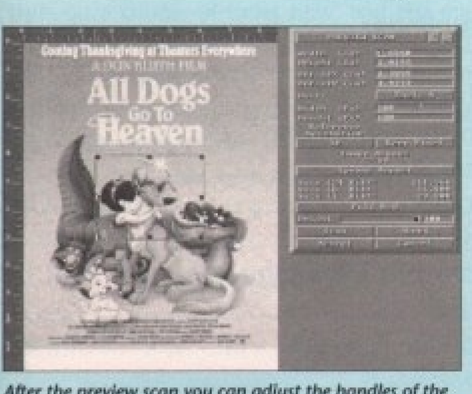
Forgetting the costs of the colour separations and the plates and the inks and the special types of paper you need for decent colour results, there's the more immediate problem of getting coloured photographs and illustrations from paper into the computer.

To do this you need a colour scanner. Colour technology has advanced quickly over the past three years or so, and it's becoming cheaper all the time – witness the number of colour photocopiers in the High Street for instance.

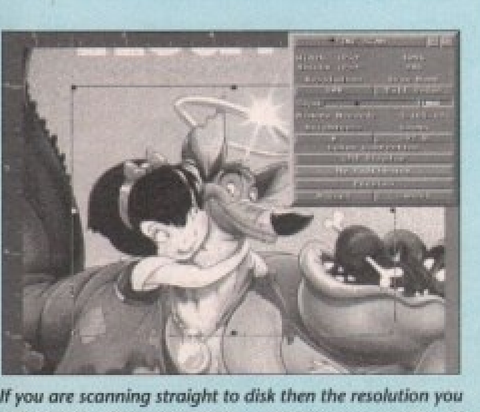
It's the same with colour scanners, and Epson have just broken the sub-£1,000 barrier with their GT-6000 A4 flatbed (known as the ES-300C in the States).

At first sight the GT-6000 looks a lot like a little photocopier, until you peek under the lid. Through the glass you can see into the beast's belly, which consists of the tractor mechanism and the scanning head.

If it was a car you'd find yourself mumbling "plenty of room under the bonnet". Its footprint is 20 by 12in, and it's just under five inches high. A small control panel on the front sports three buttons that – thanks to the software – you'll probably never need to use, and an LED display provides feedback about brightness and magnification levels.



After the preview scan you can adjust the handles of the bounding box so that only the part of the page you are interested in gets scanned



If you are scanning straight to disk then the resolution you can scan at will be dictated by available storage space – if you're scanning to memory you'll need a lot of it

At the other end there is an on/off switch, and three sockets – one for the power supply, plus serial and parallel ports.

The parallel port is used to connect it to the Amiga, using the special cable provided – it's not a standard parallel (printer) cable, but that's all it is, a cable – no lumpy interface hardware to worry about, as it plugs directly into the Amiga's parallel port.

The GT-6000's lid is triple-hinged so that books up to about two inches thick can be placed on the scanning window and the lid still close – if you need to scan something thicker than this, the lid can be removed completely by simply lifting it out of its slots, as it's not actually fixed to the scanner.

The program that controls the scanner costs extra – £129.95 – but is a superb piece of software. Written by ASDG, it is basically an Art Department Professional (ADPro) "load module", except that it can be used on its own, without having to own ADPro – if you want ADPro as well it will set you back about another £200.

Without ADPro the scanning software scans direct to disk, only displaying a greyscale preview of the subject. Be warned that 24-bit IFF ILBM files are big – anything worthwhile won't fit on to a floppy disk, so a hard drive is an absolute requirement.

The preview scan can be of the whole bed (216mm by 297mm, which is US Letter paper wide and A4 paper length), or of an area of the bed specified by moving the handles of a bounding box. String gadgets allow you to enter measurements in inches, centimetres or pixels if you need this kind of accuracy.

Once you have decided which area of the preview scan is to be scanned for real – by placing the bounding box around it – you hit the Accept button, after which you are given a further requester of options.

From here you specify, among other things, the scanning resolution and whether the scan is to be full colour, greyscale or mono.

Memory

The GT-6000 can scan at a 19 different resolutions, ranging from 50 to 600dpi. Between these limits are resolutions that match the output resolutions of almost every printer on the market – 9-pin, 24-pin, inkjet, bubblejet, laser or whatever.

The greater the resolution at which you scan, the more memory or hard disk space you will require to store the image. To take extreme examples, a full colour A4 scan at 600 dpi requires about 140Mb, a mono A4 scan at 50dpi needs just over 275,000 bytes.

To take a more sensible example, to scan a 4 by 3in colour photograph at 300dpi you'll need about 4Mb of storage space.

In operation the GT-6000 is quiet – all that can be heard are a few high-pitched whirrs like a dentist's drill as the scanning head positions itself, followed by a low rumbling as the scan is performed.

It's all over in one pass of the head – some rival scanners need to do three passes – which takes between a few seconds and ten minutes depending on the size and type of scan, and the resolution selected.

The results are stunning. Even when converted from 24-bit (16.7 million colours) to HAM (4,096 colours), the quality on-screen makes you gasp.

Of course you won't get photographic quality results from 24-bit pictures on dot-matrix colour printers – their resolutions are too low and they simply can't handle that number of colours – but imagesetter output is excellent provided you scale the graphic correctly.

The only disappointment with the GT-6000 is that it doesn't scan transparencies very well – they come out dark and muddy, but at least the manual has the honesty to admit this fact and suggest a workaround.

Epson GT-6000 A4 flatbed colour scanner
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AMIGA COMPUTING ADVERTISERS' INDEX

Smokin' CDTV

Dave Winder on a game that takes you into the hustling, gun-toting world of the Wild West

On-Line Entertainment have been responsible for more CDTV titles than anybody else so far, and certainly have a keen sense of fun when it comes to their games.

Next month I'll be looking at what they have done so far, and what is in development. I'll also be talking to On-Line's mastermind Clem Chambers.

As a taste of what is to come, I thought I would take a look at one of On-Line's recent releases, Town With No Name.

Best described as an interactive cartoon experience, Town With No Name – TWNN from now on – is based upon the Spaghetti Westerns of the early 70s.

You take the role of The Man With No Horse, and having rode into town and shot Evil Eb's brother you spend the rest of the game trying to avoid being shot by the rest of Evil Eb's gang.

Humour

The humour of On-Line Entertainment, and That of Fergus McNeil who Directed TWNN, is apparent throughout the game.

For example, if you select the pebbles around the base of the sign that forms the main menu selection at the very start of the game, you are treated to a most unexpected display. I won't tell you what it is because that would only spoil the fun.

While the gameplay is irritatingly simple at times, there are enough different ways of doing things to keep you occupied for quite a while.

This is a game that really tries hard to live up to the title of "interactive". I have played it through a couple of times now, and still managed to find new and unexpected sequences. In fact, after a while most of the fun starts to come from exploring the game to see just what Fergus has hidden away inside.

A hint is to take time out and shoot at the sky, or at a building, instead of the baddie who is trying to kill you. You may die, but you may be in for yet another audio-visual treat.

It is obvious that TWNN'S development went through the same stages as a movie. There is even a "Making of TWNN" section for goodness sake!

Lots of cinematic tricks and angles were used, some working better than others. The aerial shots and especially the feeling of flying down from great height into the scene were very well done.

The animation is smooth, if somewhat flat and simplistic on the whole, reminding me of the early CinemaWare games – but there is nothing wrong with that.

Town With No Name is let down by its lack of real lasting gameplay, but the interactive elements and the fact that there is so much humour and so many hidden sequences lift it above being just another game.

Irritation

An amazingly small point, which causes me an amazingly large amount of irritation, is that the "clang" used for the input acknowledgement (when you press button A or B) is a noise which stops being amusing after you have heard it for the 99th time!

A pat on the back to Clem Chambers and his team at On-Line though, for continuing to be the people who are actually writing games for the CDTV rather than simply porting across games from the Amiga and stapling on some extra graphics and audio.

Don't miss next month's *Amiga Computing* to find out what else Clem has up his sleeve.



New music format for CDTV

It is a well known fact that the ITV Chart Show is produced with more than a little help from an Amiga or two. Indeed, *Amiga Computing* ran a competition in conjunction with the producers of the show back in the November 1991 issue.

Now the CDTV is set to break into the world of the Top 40. GJ Productions, in association with Almathera Systems, are launching a new concept in the music industry – the CDTV Interactive Video Single.

Playing like a normal audio CD in a bog standard CD player, the Interactive Video Single breaks new ground when you shove it into your CDTV. The music is still there, of course, but is now accompanied by synchronised animated graphics which are under the control of the user.

It certainly sounds as if it will be a humungous advance over the CD+G format, which never really took off (let's face it, the countdown sequence stopped at four).

By the time you get your mitts on this issue the first of these Interactive singles, by Guru Josh, should be available, followed by Interactive Video Albums if everything goes according to plan. I hope to bring you a proper review of the format just as soon as I can get my sticky mits on a copy.

Not content with just the one innovative advance, GJ Productions and Almathera Systems are also working together to offer a professional music service to developers of CDTV titles.

Considering that GJ Productions handle such well known artists as Right Said Fred, 2 Unlimited and Technotronic, it looks like we could be in for some stunning soundtracks on CDTV titles in the future.

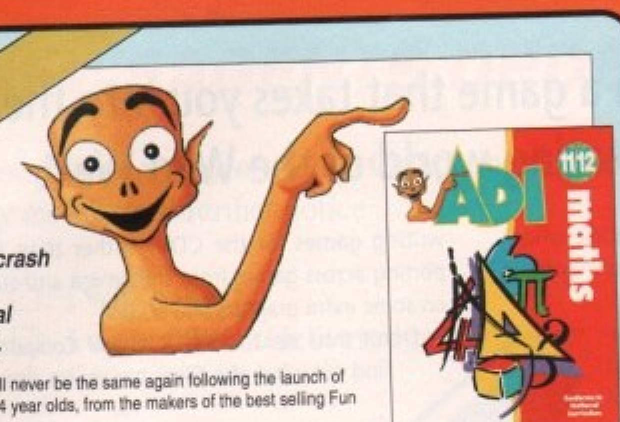
The thought of playing a CDTV game with superb graphics and a Top 10-selling soundtrack is really quite exciting. Let's just hope that any developers out there are listening too, and will make use of such facilities.

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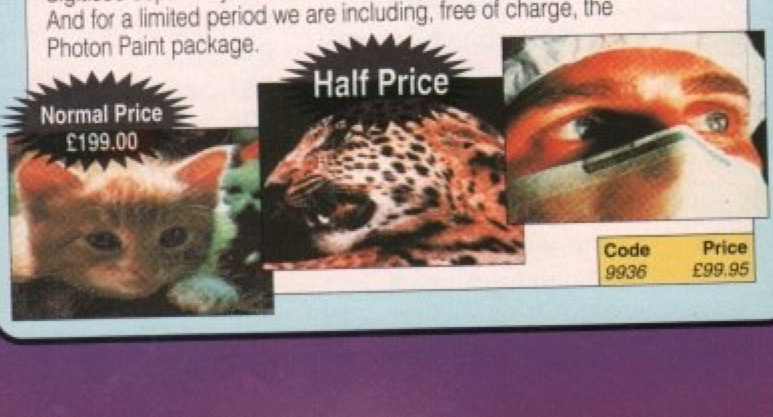
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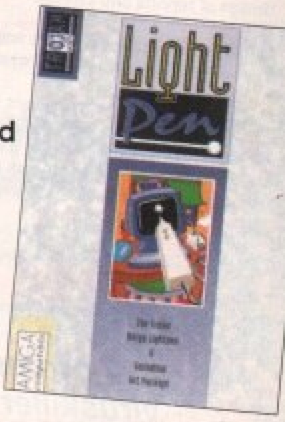
X-COPY PROFESSIONAL caters for all your needs, included in the package is a small hardware interface that plugs into the external disk drive port at rear of the Amiga and your external disk drive (if you have one) plugs into the back of the interface. This allows the Digital Bit Image Copy Mode to use the Adaptive Pulse Width Modulation routines to backup virtually all known discs.

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Trojan Light Pen

Attention All Designers!



The Trojan Amiga compatible lightpen can be used as a complete replacement for the mouse in many applications. Particularly useful in drawing and design, the two button pen provides the user with a very direct method of control.

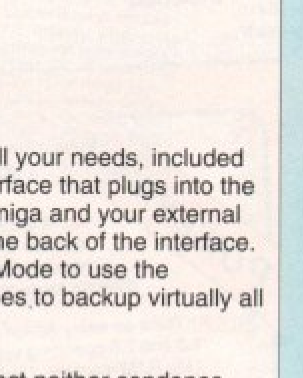
This package also includes KWIKDRAW - a lightpen compatible drawing program, plus a lightpen driver that allows the pen to be used with most programs that run from Amiga Workbench. The lightpen is also compatible with: *DPaint III* and *IV, Photon Paint, Workbench 1.2/1.3, Battlechess, Professional Page, Music-X and Audiomaster V2.*

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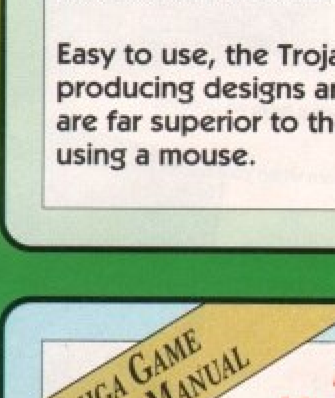
Amiga Game Maker's Manual

Amiga Game Maker's Manual – with AMOS Basic

by Stephen Hill

Stephen is the author of Sigma's best-selling *The Game Maker's Manual* for the Atari ST - and he's the author of the new AMOS (Amiga Operating System) Manual, so nobody is better placed to write this book.

The creator of AMOS, Francois Lionette, has produced the most powerful games programming system. With it, Amiga games equivalent to such best sellers as Xenon 2 and Blood Money can be produced – it's so straightforward that many people will buy an Amiga simply to run AMOS Basic.



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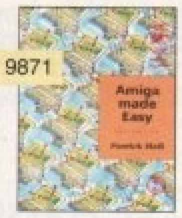
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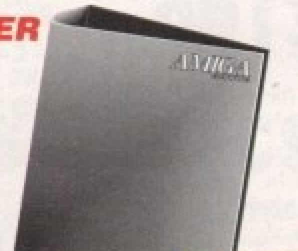
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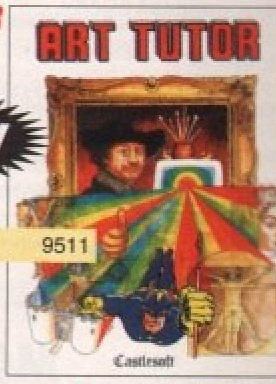
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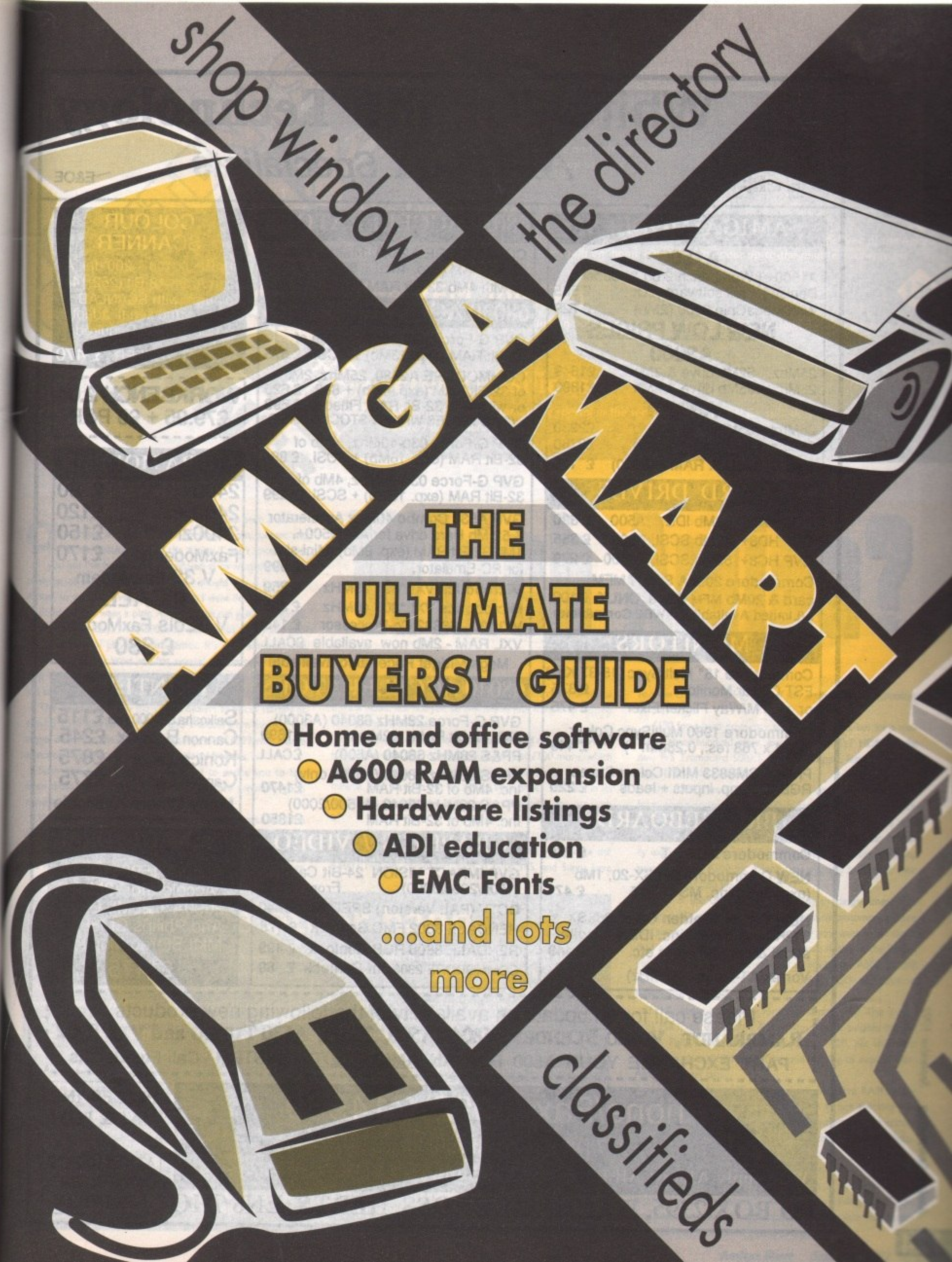
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CONTENTS

A-Z OF VFM

Which Amiga?

Over the last couple of months there has been a considerable amount of press coverage about current and future development of the Amiga. I don't know about you but I've become fairly confused as to what the current position of the Amiga is and what I should buy if I want an Amiga, so with my investigator's hat on I went detecting.

Firstly, if you want a plain Amiga just to run games software, your choice is easy. The A600 is in widespread supply and perfectly capable of playing most games. It's different from the A500 in a number ways and has several new features that will help Commodore continue to stay ahead of their competitors, but essentially it's still an Amiga and will run existing software.

The A600 is available from most dealers at prices starting at around £379 and upwards. It is also available from most of the bigger dealers at the Commodore set price of £399 with a large selection of games and other promotional freebies.

Such offers are admittedly designed to entice you to buy from these dealers, but usually the offers are genuinely good value for money and worth every penny.

What if you want to do more than just play games? Well the Amiga is a computer rather than just a games console. As such it's expandable, but because the A600 is so new it doesn't have this expandability. Given time it will have a collection of its own expansions and peripherals to match those currently available for the A500, but not yet, so unless you just want a hard drive, stick to the A500 Plus.

This takes us to the thorny subject of hard drives. The A600 is available with a hard drive built in for just £100 more, which looks like great value, but let's just think about this for a minute. You want to buy an Amiga because it's the best in its field. Why shouldn't this apply to the hard drive you use with it?

The hard drive supplied with the A600 is good value for money, yes, but far from the best, and in the years since the A500's release, companies such as GVP, IVS, and Supra have had the chance to bring state of the art hard drive technology to the Amiga.

£100 for a hard drive may sound good value, but for a couple or three hundred more you can go for GVP HD8+ or the new IVS Trumpcard 500AT. Both are bigger, faster, and offer up to 8Mb RAM expansion.

The A500 Plus is still on sale and, contrary to comments from some sources, the A500 is far from a dead product. Whilst the A600 will be expandable eventually, for the time being the A500 Plus is the only sub £500 Amiga that can be easily expanded. Companies like GVP, IVS, and Vortex will keep supporting the A500 for a long time yet and look after their customers far into the future.

Most of the UK dealers, particularly the larger ones, have also earned a reputation for backing up their customers and are not about to forget A500 buyers. So if you want to do more than play games or want to expand your Amiga in the future, you really have no choice other than buying the A500. I'd still recommend and, in fact, intend to buy an A500 and have no fears about doing so.

Finally, there is the often forgotten Amiga 1500. This is perhaps the most expandable Amiga with a price suitable for the home. Fully compatible with the Amiga 500, yet with real expansion slots, it is ideal for anyone wishing to expand their Amiga at a later date.

With an Amiga 1500 you can easily fit extra RAM, more hard drives, flicker fixers, accelerators – in fact anything you can think of. In this way you can buy a low cost start-up system and gradually expand it to a fully functioning graphics workstation!

So what are my recommendations? Well if you want to play just games, the A600 cannot be beaten. If you want a fully fledged home computer buy the A500 Plus while you still can. And if you want a really expandable computer with real potential look at the A1500 – it's hard to beat.

On the other hand...

COMMODORE is presently taking the Amiga, albeit slowly, through a major evolutionary process. The death of the multi-million selling A500 and its replacement with the A600 should be enough to confirm this suspicion – despite Commodore's silence on the matter – and prompt the Darwins among us to look at the other machines in the range with an eye to the survival of the fittest.

What becomes immediately apparent is that the only member of the Amiga family other than the A600 which will survive into 1993 is the A3000. The release of a new mid-level Amiga in the autumn will spell the end of the A1500/2000's manufacture in exactly the same way as the A600 closed down the A500 production lines. Not all is doom and gloom for present and prospective A1500 owners, however, as the machine is still the most stable and expandable Amiga around, a situation which is unlikely to change if the new machines are released in slimline form. In addition, it is highly unlikely that Commodore will drop the Zorro II expansion slot standard, so a steady supply of new A1500-compatible peripherals seems secure.

The present range of applications to which the Amiga workhorse is now being put form another guarantee of its longevity. Commodore may not think twice about changing the standard at the low end – the A500 has sold far too many units to be deserted by the third party manufacturers – but they would have to be a few chips short of a motherboard to damage the Amiga's foothold in the serious markets.

That said, we would have scoffed at the idea of the A500 Plus going belly up less than a year after its release, so we should perhaps take all assumptions about Commodore's intentions with a pinch of salt.

Shop Window

Amiga Mart's monthly guide to the latest Amiga products

ADI

At long last someone has produced a piece of educational software that doesn't treat the user like a complete drivelling idiot.

It seems that the vast majority of educational programmers think that all children are brain dead until they reach 14. But someone has finally cracked it and hit a happy medium between programs that are too hard to use and too easy to be bothered with.

Many other packages I've seen in the past that have supposedly interactive characters are very poor indeed. They invariably have very badly animated stick men with a repertoire of about three sentences.

This isn't the case with Adi. Most of the time you can't get his ugly mug to belt up. Adi can only be described as an ugly – but likeable – little alien who lives in your machine. He's there to encourage when answering questions or moan at the kids when they play games all the time.

Almost human

He's a very chatty little bloke and is very well animated. From his position of power in the top left-hand corner of your screen he frowns, smiles and gets excited, and angry at the users.

If you click on him with the mouse he moans at and generally abuses you, but if you leave him long enough he'll have a kip.

On the packaging it states that Adi relates to children in a language they understand. This was the one thing that I thought would be the death of the program.

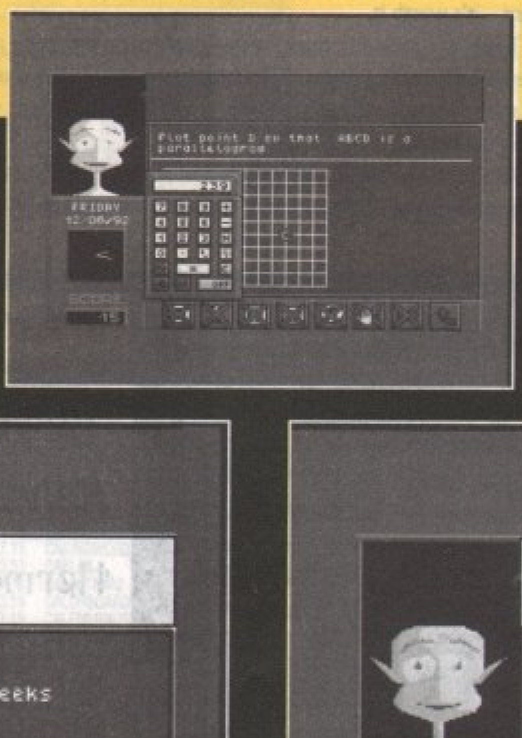
There is nothing, but nothing that will put children off more than out-of-touch "adults" trying to be really hip and with them – right kids? It always comes across complete bobbins that makes children cringe.

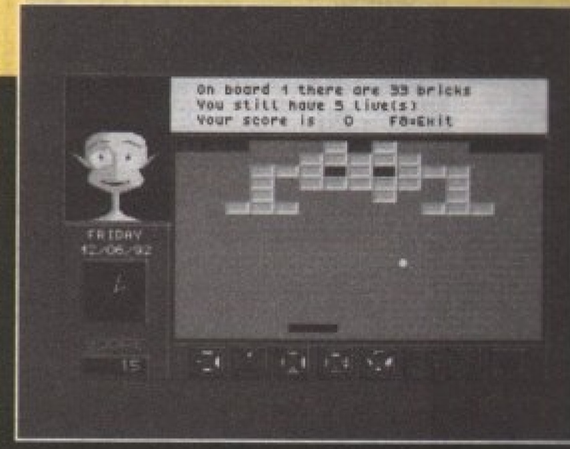
After you've booted up, you enter what's called the Environment. This is a sort of workbench in which you can talk to Adi and enter all the various sub-applications.

On this workbench there is a clock – which is updated by the internal clock on your machine – and various icons along the bottom of the screen. This is how the pupil gets around the Environment's main education system and the games.

There are no worries about children getting confused or lost in the program because it has its own built-in tutorial – conducted by Adi, of course. There is a big list of tools available in the Environment, like a calculator and a diary. I thought the calculator was an especially good idea because you can still call up the tools on top of the applications, so if you're like me and can't do 11-year-old-standard sums without a calculator, it's great.

The education system is actually split into two parts. The first is a document's section where you are shown a slide show





Games – too much of a tempatation

on the subject of your choice. There are all sorts of topics ranging from volcanoes to the circulation of blood around the body. Graphically the slide shows are brilliant – they're clear and concise with a good sense of humour thrown in.

There was also a show on pregnancy and child birth which had most of the *AC* editorial staff running for cover.

Section two of the education system – the applications section – is the program's most impressive feature. Each application that you enter from the Environment has its own theme.

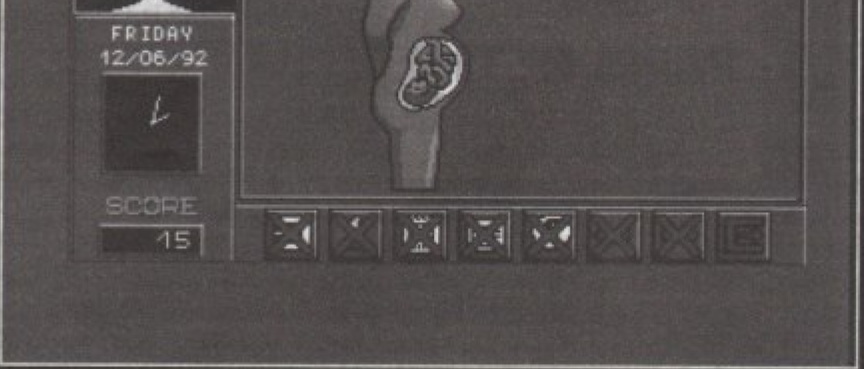
For instance, the Maths application's theme is the seven wonders of the world – the various different wonders have maths subjects tagged with them.

One of the most appealing things about the applications is the quality of the graphics. Education packages are notorious for their diabolical graphics, but on the whole Adi's graphics are beautifully drawn.

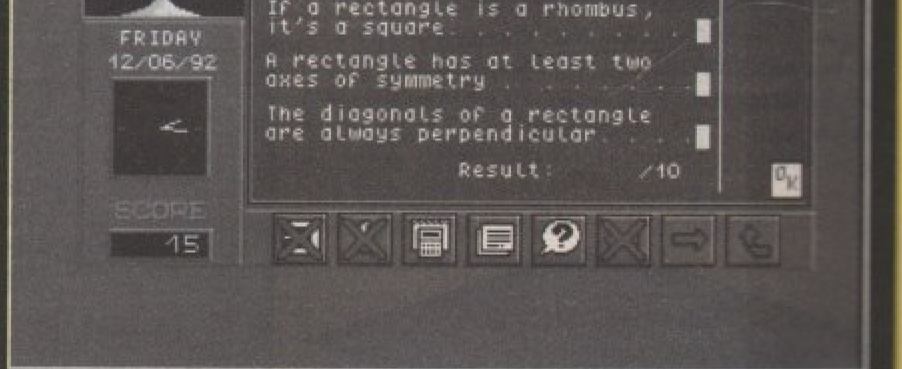
As the pupil gets further through the program, the questions become progressively harder and to hold interest they're quite diverse. Each time you get a question right or wrong there is a little animation that goes with it.

One major pitfall in education software is the way the questions are structured – other packages' questions have been lifted out of a text book and are deadly boring.

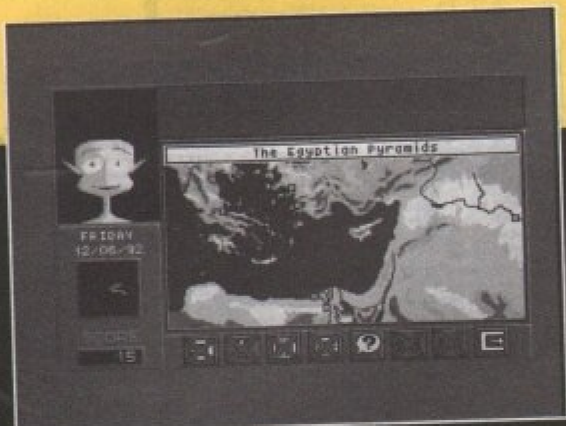
Adi's a winner because the questions have been designed for ➤



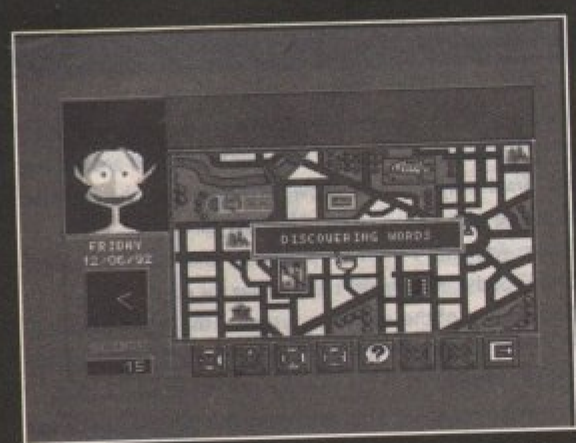
A tasteful representation of child birth



Maths 11+ – had us stumped



One of the seven wonders of the world



He's still making faces in the corner

the program and have been worded well. When answering questions there is very little typing involved – mostly it's just a case of point and click.

There is a large incentive to actually score well on the applications because what do points make? Not prizes but games, and lots of them. There are nine in all, but you must gain the points to gain entry to the games.

The other application available for the Environment is an English tutor which has a cinema as its theme. The English tutor is a little more specialised than the maths program – it concentrates more on the finer points like prefixes rather than starting relatively basic and working its way up.

There are a few flaws which aren't really anything to do with the program. The package has a skip feature which allows a pupil to skip over any question he or she doesn't like or cannot do.

Now put yourself in the position of an 11-year-old. Would you skip the questions that were boring or tricky? Also the games option is not always a good idea because you can enter it at any time and it's a little too much of a temptation.

To be honest this is the best piece of educational software I've come across. It's unpatronising and more to the point, fun, which something that a lot of programs claim to be and definitely are not.

Europress Software
Supplier: Europress Direct
Phone: 051-357 2961
Price: TBA

Shop Window

Action Cartridge Super 4 professional

Another copier, and a tricky piece of software to get working, but once it's up and running it's fairly impressive. It comes in the shape of a cartridge covered with last year's Christmas wrapping that you plug into the side of your Amiga in the DMA port.

It enables you to freeze any game or application at any time you like by twisting the little knob on top of the cartridge. The knob not only freezes the action but actually controls the overall speed.

This is handy because you can slow down tricky bits on games, as I did on Project-X.

Once the software is installed, you escape out of the main menu and load up whichever application you want. Once in the application, hitting the big red button on the card pops up the lovely mouse-driven menu, full of options. The menu would be fine but it gets very technical and confusing.

Enough talk of twiddling knobs – it's nitty gritty time. A lot of the options on the menu are pretty complicated, but learn them – it's worth it.

There are tools for changing the graphics on the game and there's one cracking little utility which lets you alter the sound. All the sound is displayed in waveform and you can fiddle at will using the mouse.

As well as the sound utility there's an automatic cheat mode that will alter the configuration of the game and give you infinite lives. Remember though, that cartridges such as this should never be used for commercial software theft.

In spite of the lack of decent copying utilities the cartridge isn't bad but I really can't see the attraction for home use. If you want infinite lives and like fiddling with other people's programs then it's worth giving it a try. Otherwise I would just stick to software copiers that do just as good a job.

Supplier: Power
Phone: 2348 4388
Price: £55
Phone 0234 843388

Super Ami Card II

After grunting and groaning with X-Copy you've probably had enough of copiers, but hardware copiers such as Ami do have a valid place on the market. Ami card works by taking the signal that comes from your external drive and making an identical copy of the information on your internal drive.

Sometimes the card may have to convert the signal to rewrite the data on to the other drive. This is where other copiers frequently fail – because of the way they do or don't convert the signal, they either push the data that is to be copied onto the target disk or change the rate at which it is copied.

To look at Ami it's a pretty unimpressive piece of equipment – just a small dongle about 2in by 1.5in in size that plugs into your serial port, your external drive plugging into the back of the dongle, piggy-back style.

Along with the card is the driving software that installs the card and gives you the various copying options.

The software works with the card in the memory on top of professional DTP. The only problem I found with a few of the fonts was the loss of clarity when using them on a small point number (below 12pt).

Volume four contains the most diverse fonts – there are some really bizarre ones that no-one would ever use, like a Dingbats selection with nothing but graphics of trains. But there are some good classic fonts in there like Black Chancery or Hermosa.

The price that EMC are asking is outrageously low for the number of fonts you actually get in the package. £12.50 for 60-odd fonts including all the different weights is naff-all compared to paying £60 to £250 pounds for a single original Adobe font.

All the fonts in all the volumes are compatible with PageStream v2.1 or 2.2 and Professional Page v3.0 and they can all be printed using a dot matrix.

And there are no worries about having trouble printing the fonts because they've all been tested on PostScript and HP Laserjet emulations.

If all the really ridiculous fonts are ignored, you still have a sackful of good quality fonts and a very good bargain. It's a must for anyone involved in DTP.

EMC fonts

Black Chancery
Helvetica
Hermosa
LIQUID CRYSTAL
MGill Sans
PARIS METRO
Sans Serif

There aren't many packages available on the shareware market that can be used on a professional level, especially on the Amiga. EMC have a set fonts that are a very cheap and effective way to enhance anybody's DTP package.

The fonts come in volumes of four or five disks. There's a massive range, from the smooth, reliable san serifs (like the fonts supplied as standard with a package like PageStream) to the really silly ones usually reserved for party invitations or sending baffling letters to people.

In the main the fonts are reliable – not boring, but not quite up to the standard of Adobe. But EMC have hit on a winner because they've combined quality with quantity.

With five different volumes to choose from there's bound to be something in there that you want. You can't really go wrong – every volume goes right across the board, starting with the compulsory Dingbats, moving to the more sober typefaces that are going to get used more often.

Somebody has really thought about the mixtures of fonts on the volumes. Volume six contains all the serious fonts commonly used in publishing – MGillSans and Helvetica, for instance – and it also contains the commonly used theme fonts like the Paris Metro.

Volume five has a lot more theme fonts like Liquid Crystal display but there are still a couple of really good fonts like Search Light which could be used for pro-

Shop Window

all other memory-resident programs, just like a normal software copier such as X-Copy.

After booting up with the software everything is run off a menu with the mouse. It's relatively friendly apart from the manual which gets a bit too technical.

To completely honest there was absolutely nothing the card can do that can't be done with software copiers like D-Copy or X-Copy and in my opinion X-Copy is a damn sight easier you use.

The card just has more options to fine tune the copy like changing the Sync Delay and the Overlap. For doing very high quality copies the card's perfect, but it is a laborious process. Again the laws forbidding software theft should be borne in mind when using this product.

Supplier: Blitsoft
Phone: 0908-666 265

Art Tutor

It's a sad fact of life that students still have to put up with some bumbling teacher waffling on about obscure painters. Hopefully programs like Art Tutor will take over very soon and will do a much better job, and they won't act like ageing hippies and have silly beards.

I think it would be a good idea to make it clear that this program has nothing to do with art research. There is no information about other artists – all of the tutorial is dedicated to the practical side.

Firstly, don't be put off by Art Tutor's appearance – basically it looks like a very dodgy back room company production. Not only is the packaging shabby but the cover art is naff which is a bit foreboding.

Things still look slightly iffy as you enter the program. You are presented with a start screen though which you enter the tutorial or the studio.

The way this screen is laid out isn't very aesthetically pleasing – the typeface is bogus and the graphics themselves are just DPaint refugees.

The sun breaks through clouds once you get started, though – the tutorial is well set out with a modular learning process, so you choose which aspect of art you wish to study.

Tutorial one covers design, cartoons, landscape, perspective and vehicles – basically all the aspects that a beginner would be able to handle. To illustrate some of the points the on-screen graphics are animated, which is a nice touch.

All the different parts are very concise and to the point – there is nothing that will lose someone's attention quicker than a rambling tutorial.

Detail and techniques are concentrated on more in the second tutorial. It covers all the really fun subjects like human form and fantasy art with naked nubile beauties sat astride writhing beasties and all that cobblers. Again it's very to the point and readable which is a rarity.

The best feature of the whole package has to be the art studio. Basically its a run-of-the-mill art package with patterns and a colour palette.

It's been designed with the beginner in mind but that doesn't mean there aren't some nice little touches that professional art packages couldn't learn from. The only thing I found a little limited was the choice of brushes.

There was one nice little utility that I'd never seen before – it allowed you to design a sprite and use it as the paint brush.

This is the sort of package that is the future of education. I learned more in the day or two that I was using this program than I did in may whole six years of agony in art classes.

Supplier: Castlesoft
Phone: 0333-421 243
Price: 25.99

A600 RAM expansion boards

Countless people will have bought the 1Mb A600 since its release in spring and been deeply disappointed. After they had lovingly opened the box and set up the machine they will have realised that it won't run 1Mb applications.

The thing responsible for making it run off and sulk in a corner is the hard drive. Yes, the computer has 1Mb of RAM but a lot of that is eaten up when the machine boots up and configures the hard drive.

The only solution to this dilemma is to buy an A600 RAM expansion and up until a few weeks ago there weren't exactly hundreds of them.

Now there is a healthy enough selection for us, the Gripe Gurus, to have a wander through the good, the bad and those considering cosmetic surgery.

Amitek

First off is Silica Systems' RAM board which seems to be the most impressive. It has an internal clock that is constantly recharged by the Amiga as it is used so your machine will never say it's 3.43am in the year 2045 ever again.

You don't have to purchase the board populated, so you can stick in RAM chips as and when you need them. One other nice little touch is the enable/disable switch which allows you to turn the expansion off if any of the applications you use don't like it. Should you buy the board unpopulated it has two rows of four sockets to stick your expansions on.

To check if your card has been recognised by the machine, the free memory statement at the top of the screen should read 1,300,000 for 512k or 1,800,000 for a 1Mb upgrade.

Amitek A600
Supplier: Silica Systems
Phone: 081-309 1111

0Mb	£29.95
512k	£44.95
1Mb	£59.95

Expansion systems

The clocks on the other cards are backed up by batteries that recharged by the machine while it is running. ZCL's card has a whopping great battery which would look more at home in the back of one of those dodgy digital watches that you get from the local market.

But don't worry, because the battery will keep the clock updated until the machine is very obsolete. The existence of a battery will make the card more prone to outside damage like leakage, but that is pretty unlikely unless your machine is kept in damp place.

You have to buy the card with at least 512k already installed so you can't have a completely unpopulated board to add on to. Like the Amitek board BaseBoard also has a jumper swich to turn off the extra RAM.

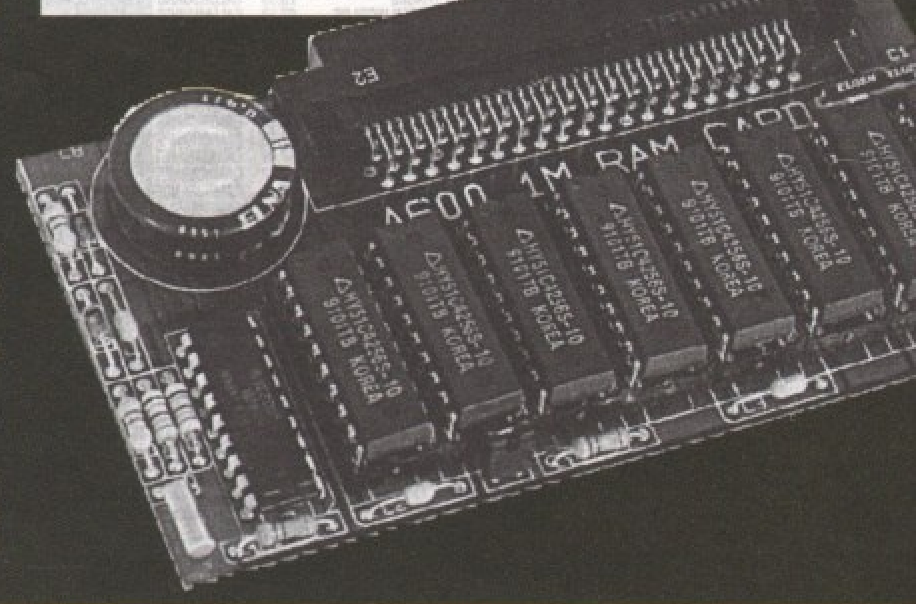
Expansion Systems BaseBoard 601C
Supplier: ZCL
Phone: 0543 414817

1Mb without clock	£49.99
0.5Mb with clock	£49.99
1Mb with clock	£59.99

New additions...

These expansions have just come onto the market:

Power Computing's Expansion	
1Mb with clock	£49.95
Audition	
1Mb with clock	£54.99



A-Z OF VFM

Software spotlight

Firmly and assuredly sorting the wheat from the chaff, this month we turn our critical gaze to home and office packages

If you can beat these prices, give us a ring

Software spotlight aims to be as objective as possible – we don't give something a good write-up unless we have good reason. If we have criticised a piece of software you own and especially like, please write in and tell us.

This week we look at home and office packages – something that most Amiga users need. We review the best – and some of the land-mines – in wordprocessing, spreadsheets and databases.

KSpread 4

Hailed as the all-singing, all-dancing spreadsheet, KSpread is, by most people's standards, the cream of the crop. This is also the view held by companies who manufacture their own spreadsheets, so you can't really go wrong.

The program itself is jam packed with features of all sorts including an icon-driven desktop-type environment which looks suspiciously like the Atari ST workbench.

One major point in its favour is the ability to load Ascii files and crunch them as data. The two things that will put a lot of people off are the price and the fact that it was written on an ST.

KSpread 4
Available from SoftMachine
Price: £75.95
Score = 9/10

Advantage

It's a damn sight cheaper than most of its competitors, but doesn't do anything special. After this program was written it was quickly superseded by its big brother, Dcalc, which has quite a few more features and looks flashier but you pay through the nose for it.

The main thing in Advantage's favour is its price which is a good £30-odd cheaper than other spreadsheets that do the same number crunching. Outdated, but does the job.

Advantage
Available from SoftMachine
Price: £76.95
Score = 8/10

Wordworth

If you're out to buy a really heavy-duty wordprocessor for endless word crunching, then this isn't the package for you. Wordworth is just a very good and extremely powerful home or industry wordprocessor.

There are lots of nice utilities in the program, various pull-down menus and a beast of a spelling checker and dictionary (110,000 words), along with a 30,000-word thesaurus.

Style-wise, the program supports Compugraphic, Colourfonts and standard Workbench fonts, which is enough to keep anyone going for a while.

Wordworth
Available from Future World Computers
Price: £129.99
Score = 9/10

Protext 5.5

As far a wordprocessing goes, this one cooks your dinner and walks your dog. It's incredibly powerful, but not too hard to get to grips with, unlike the older versions.

It runs under Workbench and the usual utilities are available on pull-down menus. Protext 5.5 doesn't have a lot of the pretty frills other packages have but it does the necessary better than the rest – the searches and various other utilities are very powerful. A serious heavy duty package.

Protext 5.5
Available from ARK
Price: £101.99
Score = 10/10

Superbase Professional 4

This is the Mother of Amiga databases. Its handling power for information is quite amazing but its size limits it to handling large amounts of data.

There would be no point spending three figures on this database for your personal numbers because you could get something adequate for £10 from a shareware library. This program is only financially feasible for the stupidly rich or big companies.

Superbase Professional 4
Available from ARK
Price: £189
Score = 8/10

Superbase Personal 2

The opposite of the other Superbase program. This one's designed for personal and not company use. It's better suited financially as well as information-wise to the personal user, but bear in mind that it isn't as powerful as a lot of databases, so make sure it will fulfil your needs.

This sort of database is ideal for keeping records of your LP collection, names and addresses and so on.

Superbase Personal 2
Available from GHS Technology
Price: £65.95
Score = 8/10

Bargain basement

If cash is short, you don't have to stay completely out in the cold from the worlds of number crunching or word wangling. Here are some old but well-loved programs that still do the job, but now with a Zimmer frame.

This month's crusty classics include K-Text at £14.95 – a cheap and cheerful wordprocessor; Home Accounts at £19.99; Organise, a database that does the biz for £19.78; and DG Calc at £29.99, a good budget spreadsheet.

None of these programs are anywhere near as powerful as those featured elsewhere on this page, but they will do the job.

To find out where to get them from, look in the back of the magazine at the advertisers' index. All the prices are those advertised last month.

To find other bargains like these, take a stroll through the small ads and you're bound to see something you want.

Hard Times

Every month, a selection of some of the best Value For Money hardware bargains to be found in *Amiga Computing*. True at-a-glance shopping for all our readers. Remember – if you are a supplier and you can beat these prices, let us know!

NEXT MONTH

More of your best buys. They don't go in unless you tell us about them, so if you see a better buy, or can beat those shown, get on the phone to:

Amiga Mart VFM
0625 878888

HARD DRIVES

Make	Capacity	RAM upgrades	Compatibility	Game switch	Thru-port	PSU	RRP	AC price
Trilogic								
Dataflyer	45	Y	500/500+	N	N	N	259.99	
Dataflyer	45	Y	500/2000	N	N	N	229.99	
Dataflyer	105	Y	500/500+	N	N	N	389.99	
Dataflyer	105	Y	500/2000	N	N	N	359.99	
Hawkwell Electronics								
GVP	52	Y	500E+	Y	Y	Y	399.95	379.95
Magneto Optical	128	-	A500	N	N	Y	1,199	1,150
Magneto Optical	128	-	1500/2000	N	N	N	999	950
A600Internal	40	-	A600	N	N	N	375	350
Supra 500xp	52	suppl. with 1Mb	A500	-	Y	Y	380	375
Gasteiner								
Gasteiner	52	Y	All	Y	Y	Y		349
Gasteiner	105	Y	All	Y	Y	Y		599
Audition Computers								
GVP	105	Y	A500+	Y	Y	Y	-	439.99
Delta PI Software								
Supra Wordsync	52	N	-	-	Y	-	-	239
Supra Wordsync	105	N	-	-	Y	-	-	379
GVP HC8 A2000	52	Y	-	-	-	-	-	279
GVP HC8 A2000	120	Y	-	-	-	-	-	419
GVP HD8 A500	52	Y	-	-	-	-	-	349
GVP HD8 A500	120	Y	-	Y	-	Y	-	469
ADD								
Addhard	45	Y	Y	N	y	N	265	265
Addhard	70	Y	Y	N	Y	N	345	345
Addhard	105	Y	Y	N	Y	N	395	395
Addhard	205	Y	Y	N	Y	N	495	495

RAM BOARDS

Make	Capacity	On/off switch	Chip upgrade	Internal /external	Compatibility	RRP	AC price
Trilogic							
Trilogic	1Mb	N	Y	Int	500+	49.99	39.99
Baseboard	0.5-4Mb	N	Y	Int	500/500+		79.99 – 199.99
Dataflyer RAM	1-8Mb	N	Y	Int	1500/2000		89.99 Unpopulated
Hawkwell Electronics							
Virgo v500	0.5Mb	Y	Y	Int	500	-	24.95
Virgo v500+Clk	0.5Mb	Y	Y	Int	500	-	29.95
Power PCR1.5	1.5Mb	Y	Y	Int	500	99.95	89.95
Virago V4000	4Mb	Y	Y	Int	500	198	198
Power 16chip	0.5Mb	Y	Y	Int	500	24.95	19.95
Power 16chip+clock	0.5Mb	Y	Y	Int	500	29.95	24.95
Power 1.5Mb	1.5Mb	Y	Y	Int	500	85	79.95
Power 1.5Mb	1.5Mb	Y	Y	Int	500	89.95	69.95
Analogic Computers							
ADD	A500/0.5Mb+clk	Y	Y	Ext	100	-	24.95
ADD	A500/0.5Mb	N	Y	Ext	100	-	34.95
ADD	A500/1Mb	N	Y	Ext	100	-	54.95
Power Computing							
Power	A500/0.5Mb+clk	Y	Y	Int	500	29	-
Power	A500/0.5Mb	Y	Y	Int	500	24	-
Power	A500/+/0.5Mb+clk	Y	N	Int	500	24	-
Power	A500/+/0.5Mb	Y	N	Int	500	19	-
Power	A500/1.5Mb	N	Y	Int	500	79	-
Power	A500/1 Mb	N	Y	Int	500	49	-
Power	A500/1Mb	N	Y	Int	500	39	-
Power	A500/8Mb	N	Y	Int	500	2Mb 129	
						4Mb 189	
						8Mb 299	
Power	A500/2Mb	N	Y	Ext	500	99.95	
	With Clock1Mb	-	-	Trap	A600	49	
	Without Clock1Mb	-	-	Trap	A600	45	
Delta PL Software							
Supra Ram 2000	2-8Mb	N	N	Int	-	149	
Supra Ram 500rx	2-8Mb	Y	-	Ext	-	149	
Pheonix A600	-	-	Trap	-	-	_	
Gasteiner							
Alfa Data	0.5Mb	Y	N	Int	A500	29.95	26
Alfa Data	2.0Mb	Y	1Mb	Int	A500	149	99
MemoryMaster	8Mb	-	-		Int	A500	129
Audition							
A600Ram Ex1	Mb	N	Y	Trap	A600	55	
Phoenix							
A500+	1Mb	-	-	-			39.99
A500 Keybd ROM sharer	-	-	-				34.99
A500 ROM Sharer	-	-	-				24.99
Amiga 2.04 upgrade	-	-	-				79.99

A-Z OF VFM

Hard Times

TOP 10

Every month the *Mart* picks the best from the rest in our top ten hardware and software chart...

1	Adobe Type One fonts, five disks	£12.50	EM Computergraphic
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3	Power 8Mb for the A500 2Mb	£129	Power Computing
4	DataFlyer 40Mb hard drive	£229	Trilogic
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6	GVP A530 Combo 40MHz/52Mb	£659.95	Dynamite Computers
7	Supra2400 Modem	£111	Audition Computers
8	DPaintIV	£54.99	Dynamite Computers
9	Rocgen Genloc	£84.99	Dynamite Computers
10	Digiview, Digitiser	£99.95	Trilogic

FLOPPY DRIVES

Make	On/off switch	Thru-port	Single/double drv	RRP	AC price
Trilogic					
Roclite RF382c	Y	Y	Single	69.99	55.99
Cumana	Y	Y	Single	119.99	99.99
Cumana	Y	Y	Single	69.99	58.99
Analogic Computers					
Zydec	Y	Y	Double	-	59.95
Hawkwell Electronics					
Citizen or Epson	N	N	Internal A500	69.95	49.95
Power 880E	Y	Y	External anti-click	59.95	59.95
Power880DD	Y	Y	As above X2	119.95	119.90
PowerDual	Y	Y	Double	125	99.95
Gasteiner					
Gasteiner	Y	Y	Double	79.95	59.95
Power Computing					
PC880E	Y	Y	Double	49.95	-
PC880B	Y	Y	Double	69.95	-
Audition Computers					
Cumana CAY-354	Y	Y	Single	78.22	52.99
Power 880B	Y	Y	Single	69.99	67.99
Delta PI Software					
Roctec Roclite	Y	Y	Single	-	59.95
Phoenix					
Delux drive	Y	Y	Single	-	47.99

SCANNERS

Make	Type	Scan area (mm)	Max DPI	Colour/Mono	RRP	AC price
Trilogic						
Zylec	Hand	105	400	Mono	99.99	94.99
Audition Computers						
Power	Hand	105	-	Mono	-	99.99
Power Computing						
Power Scan	Hand	-	400	Mono	99	-
Delta PISoftware						
Alfa-Data	Hand	-	400	Col	-	139
Alfa-Data	Hand	-	400	Col	-	249
Golden Image						
Alfa Data	Hand	-	400	Mono	199.99	149
Alfa-Data	Hand	-	400	Mono	299	239
Phoenix						
Epson GT-6000	-	-	-	Col	989.99	

GENLOCKS

Make	S-VHS compsite	Thru-port	RRP	AC price
Marrcam LTD				
Rendale 8802	Y	-	-	139
Rendale 8802 fmc	Y	-	-	178
Rendale Super 8802	Y	-	-	499
Syntronixs				
Genmaster	Y	Y	-	-
Dynamite				
Rocgen	Y	N	-	84.99
Rocgen Plus	Y	Y	-	129
Audition				
BM 2300	N	Composite	N	-
Phoenix				
RhomboVIDI	-	-	-	99.99

Classifieds

◆ Heart of China £15, Larrgs £15, Madden football £15, 40-Boxing £10, Phone 0926 50475

◆ Amiga contacts wanted 101% reply, Scott Beardwood, 17 Duke Street, Carlisle, Cumbria, CA2 5UL

◆ Protext 4.2 £30, Protext 5 £70, Prodata £55, Amstrad CPC464 + games £90. 0493 331069 Chris

◆ A520 modulator inc leads, boxed, brand new, unused, £20 or swap? Tel 0302 835595

◆ Amiga 500 deskstand, new will post to you. £20, collected £25, posted 0923 213661

◆ Star LC-200 colour printer ribbon, paper and lead £185 ono. Contact Paul 0762 323828 (VGC)

◆ Swap A500 supra modem for A500 hard drive, tel Jamie 081 517 3454 (2400 Baud)

◆ PDP - paper based PD/shareware magazine at only £1 for trial copy. Call Stephen 0553 829142

◆ PD lists and penpals wanted, 100% reply to all letters. 20 Wesley St, Caerall, Maesteg, Wales

◆ PD swappers, send lists and SAE, tel no to Ardaven Westra, Dinas, Powys, Cardiff, CF6 4HA

◆ PD collection for sale. For prices and catalogue, send disk to Ben, PO Box 15, Barry, S Glam

◆ Amiga PD library - top demos, utilities, games. 300+ disks £200. Phone 0348 872435 for catalogue

◆ Amiga contacts. Mainly business and leisure. Send lists: 157 Ainsworth Way, Middlesborough, Cleveland, TS7 9QD

◆ Help! Can you get my Citizen swift printer working? Phone David 031 554 2636 (Edinburgh Area)

◆ Amiga contacts wanted, send disks etc to Jeff, 19 Place Farm Way, Princes, Risborough, Bucks

◆ Spectrum 128K+2, £500 of games, GWO, £150 ono. Acorn Electron, games, manuals etc. Phone Matt 0553 828215

◆ B2000 43meg, HD 8meg, board 2meg, Pop £700 or part exchange, 0603 507362

◆ John Madden US football boxed, as new. £16, Phone Paul 0274 631041

◆ Amiga software disk library, most games available. For further details write to Amiga Products, Co 26, Queensway, Long Sutton, Spalding, Lincolnshire, PE12 9DW

◆ A590 c/w 2mb discs and manual, £200, Dave 0252 519092 evenings

◆ 68030 MMR, 25MHR, 1/2mb, SRAM 2mb, 32 bit dram, Canon still Video camera, Tel 021 557 2402

◆ Amiga contacts wanted worldwide, 100% reply, Write to Chris, 70 Crosby Avenue, Scunthorpe, Humbs, DN15 8NY

◆ Amstrad 5.25" internal floppy drive from PC1640, as new, £35 ono. Tel 0602 396812

◆ Ashcom 1.8mb, internal memory, expansion for Amiga 500 with fitting instructions, £65, 081 854 0624

◆ Amiga PD and games for sale. Write Dave, 22 Hemlock Avenue, Huntington, York, YO3 9DG

◆ Swap your Amiga software for details, send SAE to 42 Limoges Court, Alsace park, Northampton, NN5 6YQ

◆ Six top games for sale, £20, tel David Cain 0543 251498 inc. Batman, Bloodmoney N25

◆ Mega disk 2, two disk magazine with even more reviews, games, news, music and utilities. Send £2.50 to R Wild, 8 Cranleigh Place, Whitley Bay, NE25 9UD

◆ New to Amiga need contacts, hints, advice, Sean, 123 Regent Ropad, Hanley, Staffs, ST1 3BL

◆ BR+CJ disk mag, Jam packed, send £1.25 to 23 Fairway Road, Shepshed, Loughborough, Leics, LE22 9DS

◆ Fully loaded, B2000HD, 286HT, WB2-04, cost £4,800, sell £1,950 ono. Details on 061 330 1135

◆ Slides, Cinefiling and photos, transferred onto videotape. Fat-In-Professional, details Simeon Lloyd 0646 672376

◆ Intro's creators wanted. Write with demos: Giorgio Piazza, Via T.Vecelio No21, 20052 Monza (Milano) - Italy

◆ Amiga 1500, hard drive etc. For more details Tel 0563 71624 and ask for John

◆ Wordperfect 4.1, keyboard template, quick reference, card manual, original £150 ono. Tel 0383 416277

◆ Night Hawk BB's from 23-6-92, new. Phone 0329 845384 until then Phone 0329 45384

◆ Amiga contacts wanted by pensioner, no games, Stockport area, 59 Windermere Rd, High Lane, Stockport

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◆ A590 + with 2 megs, no drive, £160, disk drive, £40. Will post, Phone Nigel 0233 647115

◆ Amiga PD for sale. Send disk and SAE to: 2 Longbridge Close, Sheffield, S27 0DQ

◆ F14 Strike Eagle II, boxed as new, £12. Phone Paul 0274 631041

◆ Structured clip art wanted. Contact Steve Chapman, 35 Elm Road, Folksworth, Peterborough, Cambs, PE7 3SX

◆ Golden Axe, North and South, brand new in box £7 each. Clint 021 354 1825

◆ Action replay, 2 Cartridge, boxed with manual, £30. Tel 0753 817749 between 4pm and 8pm

◆ Epson LQ2550 colour printer was £999 exchange for Super plc grabber or 1500 hard disk, 0752 788534

◆ Atari 520 STE + 30 games, £100. Blakelands 618250

◆ PageStream v1.8 £55 ono. Excellent introduction into DTP. Phone Neil after 7pm 0474 702918

◆ Book about computers, cheque/PO £4.95, payable to Simon Fry, 9 Paxmead Crescent, Worthing, Sussex

◆ Amiga nutters and PD, utilities, suppliers wanted. L Gears, 49 Love Lane, Great Wyrley, Walsall, West Midlands

◆ Sega game Gear, £70. Tel 081 514 8018 ask for E-Lesh, boxed

◆ A500 + with 2 meg, Chip Ram + external disk drive + original software, £395. Mint condition, Phone 0483 724358

◆ 4 mb A500 with 20mb, A590 h/d, lots of software, £500. Will split, Ken 0929 462634

◆ Sale, Datel 4.25 modem 1200 baud £40. Action replay MKII £30. Phone 0705 692834 Daytime

◆ 12 quality clip art disks £10. J Madden, P O Box 55, Trafford Park Road, Trafford Park, Manchester, M17 1HP

◆ New PD wanted, send disks for quick reply, 7a Moss lane, Swinton, Manchester, M27 3RL

◆ Scanning service from books, mags, photos etc. Phone Chris 0024 365060 for details

◆ Amiga contacts urgently wanted, please contact Darren, 15 Eleanor Road, Harrogate, N Yorks, HG2 7AH, 100% reply

◆ C64, MPS1230 printer, mouse, joystick, reset, hundred games, worth £550, sell for £300. Dean Gloucs 543267

◆ A590 hard drive, 52mb with 2 meg Ram, boxed as new, £385. Phone 081 683 4209 (Evenings)

◆ Hires hame with Spectra - color £100. Phone Dave Strange on 0865 58531 after 6pm

◆ Amiga contacts wanted, send list by return, Ken, 58 Sylvan Croft, Ingol, Preston, Lancs

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◆ Amiga contacts wanted, 100% reply. Send to Stuart, 19 Froxfield Rd, West Leight, Havant

◆ Amiga 500 with loadsa PD, games and utilities (V1.3), £300. Tel Rhys 0695 572460

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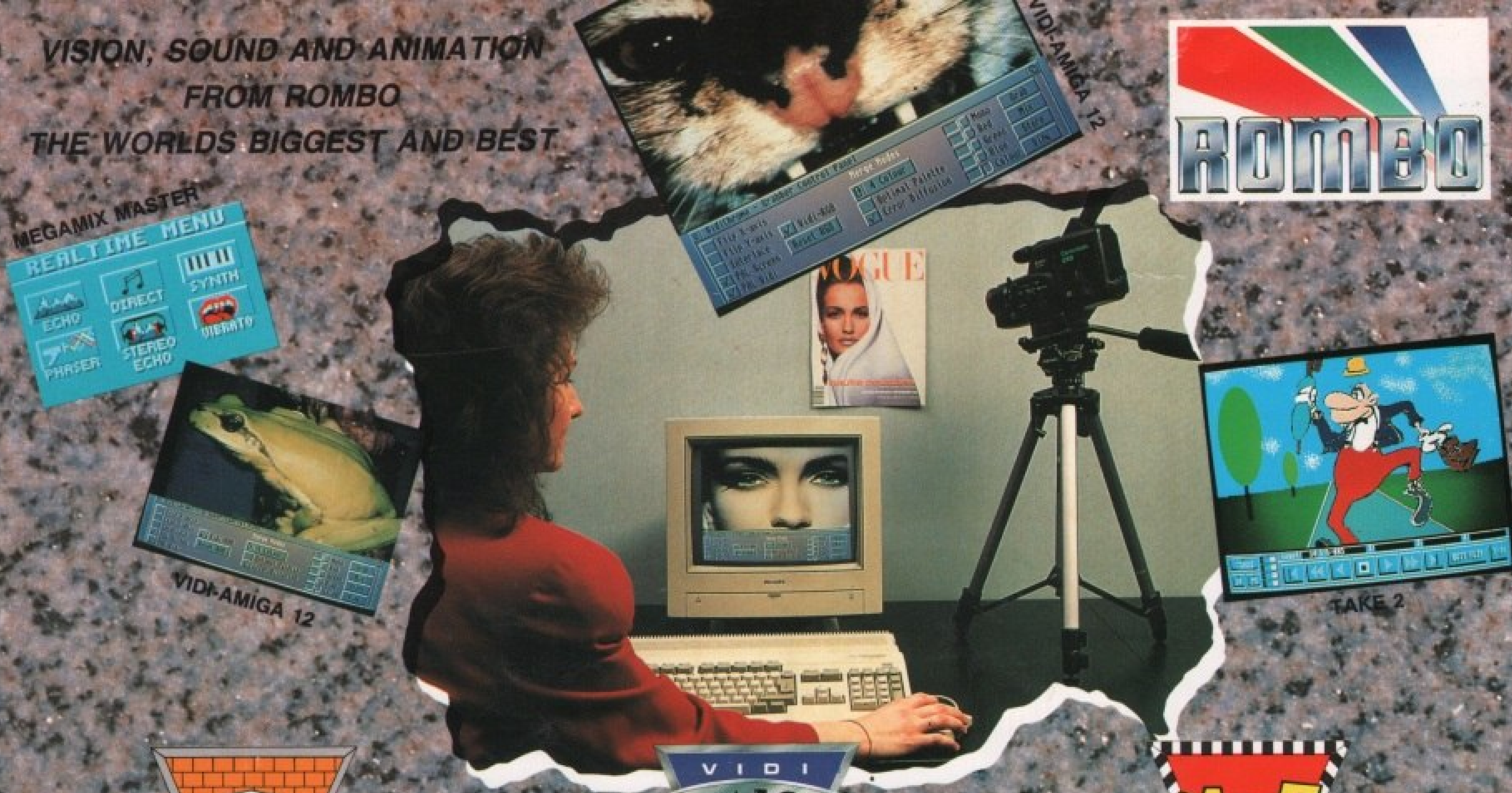
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